# Section of the History of Medicine.

President—Dr. J. D. ROLLESTON.

# Assyrian Medical Texts.

By R. CAMPBELL THOMPSON, M.A., D.LITT., F.S.A.,

Fellow of Merton College, Oxford.

#### II.

Since the publication of my Assyrian Medical Texts I have made some sixty-nine joins from the fragments therein.<sup>1</sup> These will be noted in their proper places in the translations: those which affect translations already published in PRSM. 1924 are AM. 1, 4 (K. 2615, No. 3) + 99, 2 (K. 2448 +

<sup>1</sup> To Herr Ebeling must be given the credit of noting one other in his *Keilschr. Medicinischen Inhalts* (K. 3267 + 9438, my AM. 26, 2 and 26, 8), and another which I regrettably omitted, in incorporating in AM., to acknowledge.

It will be seen that many of the vegetable drugs have been translated without comment, and for these the reader is referred to my Assyrian Herbal (Luzac & Co.). I must here record my thanks to Professor S. Langdon for the ever-ready way in which he has put his library, as well as his notes for his forthcoming Sumerian Dictionary, at my disposal.

The abbreviations used herein are: ADD., Johns, Assyrian Deeds and Documents; AH., my Assyrian Herbal; AJSL., American Journal of Semitic Languages; AM., my Assyrian Medical Texts; ASKT., Haupt, Assyr.-Sumer. Keilschrifttexte; Br., Brunnow, List of Cuneiform Ideographs; BSGW., Berichte W. d. Verh. d. kgl. Sächs. Gesellsch. d. Wissenschaften; CT., Cuneiform Texts from Babylonian Tablets; Del., HWB., Delitzsch, Handwörterbuch; Diosc., Dioscorides, ed. Sprengel; E., Ebeling, in Archiv für Geschichte der Medizin; EB., Encyclopædia Britannica, 11th ed.; Holma, Holma, Körperteile; Hrozný, Getr., Hrozný, Das Getreide im alten Babylonien; IB., Ibn Beithar, in Leclerc, Notices des Manuscrits, xxiii, xxv, xxvi; KAR., Ebeling, Keilschrifttexte aus Assur, Religiosen Inhalts; KB., Schrader, Keilinschriftliche Bibliothek; Kü., Küchler, Beitr. z. K. d. Assyr.-Bab. Medizin (I = K. 191, II = K. 71b, III = K. 61); MA., Muss-Arnolt, Assyrian Dictionary; OLZ., Orientalistische Literaturzeitung; P., Squire, Companion to the British Pharmacopæia, 18th ed., 1908; PBE., Babylonian Expedition of Pennsylvania; PC., Penny Cyclopædia; Pliny, Pliny, Natural History (ed. Bostock); PRSM., Proceedings of the Royal Society of Medicine; PSBA., Proceedings of the Society of Biblical Archaelogy; R., Rawlinson, Cuneiform Inscriptions of Western Asia; RA., Revue d'Assyriologie; SAI., Meissner, Seltene Assyrische Ideogramme; SM., Budge, Syriac Book of Medicines; ZA., Zeitschrift für Assyriologie; ZK., Zeitschrift für Keilschriftförschung.

Numbers, such as 21, 1, 1, or AM. 21, 1, 1, refer to page and tablet-number and line in AM. An asterisk \* affixed to a drug means that there is a very slight doubt about the exact species, or, a slight variability possible, owing to there being a closely allied and almost interchangeable candidate for the same drug-name; \*\*, some doubt about the identification, but good reason for it; a query (?), when there is real and justifiable doubt.

6386); AM. 2, 1 (K. 2491 + 8356, No. 4) + CT. xxiii (K. 2354, pl. 23 ff., a join, not a duplicate); AM. 3, 5 (K. 6224, No. 8) + 17, 1 (K. 6560, No. 49); AM. 6, 3 (K. 9828 + 11868, No. 22) + CT. xxiii (K. 2354, pl. 23 ff.); AM. 6, 9 (K. 10212, No. 24) + 2, 2 (K. 13884); AM. 8, 1 (K. 10891, now joined to K. 2573, No. 26).

It is probable that AM. 8, 1 (No. 26) belongs to a series which deals entirely with eyes, of which the title is  $\check{S}umma$  amelu  $[\hat{e}n\hat{a}^{II}_{-}\check{s}u]$  . . " If a man' [s eyes] . . ." (AM. 12, 7). AM. 8, 1, is followed in the series by AM. 16, 1. Another tablet is AM. 12, 7, followed by AM. 12, 4. Unfortunately little more is known, although KAR. 202 gives a catch-line which may belong ( $\check{S}umma$  amelu  $\hat{e}n\hat{a}^{II}_{-}\check{s}u$  GIŠ.MI AR-ma, etc.).

I am greatly indebted to Dr. H. R. Hall, Mr. Sidney Smith, and Mr. C. J. Gadd for much courtesy in furthering the work on these texts.

## TRANSLATIONS.

### B. DISEASES OF THE EYES (continued).

No. 28, A. AM. 11, 2 (K. 2440, etc.). To this I am now strongly inclined to think that No. 27, AM. 8, 2 (K. 10495) must be added, although there is no "join". To AM. 10, 3 (rev. of K. 2440) must probably be added K. 6425 (AM. 13, 6), although there is no actual contact. These are thus included:—

Obverse. 1. (If ditto, \*storax, Solanum . . .) [in] oil thou shalt put, apply with thy finger. (If ditto, the head of a lizard thou shalt dry . . .), ditto, of a lizard of the wall thou shalt dry, bray, in a copper pan 1 (?) thou shalt put on the fire, apply.

- 3. (Thou shalt reduce Kak ti ti  $lu^2$ ...), for three days during the night (?) to her eye (?) 3 continuously thou shalt apply.
- 4. (If a man's eyes ditto, and . . .) thou shalt mix in oil (and) pour into his eyes.<sup>4</sup>
- 5. (The brain of a kultim <sup>5</sup> . . .) [in] oil, and the brain of a male dove (in equal parts thou shalt mix) and . . . continuously put in his eyes.

<sup>&</sup>lt;sup>1</sup> ŠU.MULU "hand of a man"; cf. 19, 6, 13, and ¬¬¬ as "pan" (but doubtful; it may be some copper ingredient).

<sup>&</sup>lt;sup>2</sup> Kak-ti, Boissier, Div. 103 and 107, part of body. There is a right and left k., it may be like kibirru, or black: the verbs used of it are gam-at and mar-at.

<sup>3</sup> Mu ša ši clear on tablet.

<sup>4</sup> Cf. 13, 6, 6, and 16.

<sup>&</sup>lt;sup>5</sup> For the brains of small animals in medicine, cf. SM. ii, 701, 704.

- 7. (A raven's  $egg^1$ ...) thou shalt take out and smear a copper instrument with curd... wash thy hands in water... [in] curd thou shalt mix  $^2$  (and) apply.
  - 10. . . . thou shalt apply 3 continuously.
  - 11. . . . thou shalt bray (and) apply.
- 12. . . . tarhu-plant, one quarter (of a shekel) of mercury thou shalt bray (and) apply.
- 13. . . . one bur(?) flour of hispå(?) in oil of cedar thou shalt bray (and) apply.
- 14. ... Solanum thou shalt bray, in oil in a copper basin thou shalt beat up (and) apply.
  - 15. . . . chamomile (?), \*mint together thou shalt bray (and) apply.
  - 16. . . . in oil thou shalt bray (and) apply.
  - 17. . . . into his eyes thou shalt pour.
  - 18. (?) . . . with water of alkali thou shalt wash his eyes.
- 20. . . . (and) 5 shekels of cantharides (?) in equal parts thou shalt mix . . . needle (s) of antimony in oil and copper-dust 5 thou shalt bray (and) apply.

<sup>&</sup>lt;sup>1</sup> Cf. SM. ii, 663. I have to thank Mr. Sidney Smith for his correction in Journ. Eg. Arch., 1924, 180.

The other word for "mix", rabaku, should be discussed here, as a noun occurs spelt  $rib \cdot ki$  capable of being read  $lab \cdot ki$ . Tarbak, common, was settled by Kü. 103 (occurring 4, 5, 6; 14, 1, 7; 15, 3, 15; 15, 6, 10; 16, 1, 1; 17, 6, 2; 20, 1, 8; 22, 2 r. 13; 39, 4, 1; 45, 4, 4; 50, 3, 10; 100, 3 r. 14; etc.) from the Heb. rábak. Ribku, translated perhaps unnecessarily closely  $Geb\bar{a}ck$  by E. (xiii, 9) in K. 8347 (my 45, 4), means simply "mixture" (11, 2, 27; 15, 3 r. 6, 9 bis; 15, 5, 9; 16, 3, 15; 19, 6, 6, 11; 21, 3, 3; 24, 1, 2; 37, 5, 8; 45, 4, 4; 49, 6 r. 9; 51, 10, 3; 61, 1, 13; 65, 1, 2; 76, 3, 5 = 82, 2, 14 r. 11; etc.). It is used frequently in the phrase kima ribki tarbak; but ribku sa  $end^H$  "mixture for the eyes" (19, 6, 6, 11). An alternative is rabiku: kima rabiki tarbak (40, 5, 12; 50, 3, 10; 52, 3, 8; 53, 9, 3; 61, 2, 7; 68, 1 r. 10, 18; 80, 1, 6).

<sup>3</sup> On this as "einreiben", see E. xiv, 35, and Proceedings, loc. cit., 4.

<sup>4</sup> Cf. hispi ša gissi šar, CT. xiv, 50, 13.

<sup>&</sup>lt;sup>5</sup> It is unnecessary to point out the use of copper for ophthalmia.

- 22. . . . in a basin thou shalt cool, in a copper basin thou shalt mix, . . . of the copper basin thou shalt make an extract <sup>1</sup> (and) apply for seven days.
- 24. . . . pounded <sup>2</sup> [roses (?)], fat . . . antimony thou shalt bray, apply, and there shall be an assuaging <sup>3</sup> of his eyes.
- 26. . . . Lolium cooled in a well thou shalt take and . . . thou shalt bray old (?) (or "burnt" (?)) copper 4 in curd, as a mixture to his eyes thou shalt apply, and he will recover.
- 28. . . . Bellis, water of \*Arnoglosson, water of Solanum, . . . thou shalt take (and) in copper-dust (v. water of Lolium) thou shalt bray (and) apply to his eyes.
  - 30. . . . thou shalt reduce, pound, bray in copper-dust, apply.
- 31. . . . thou shalt bury, take out, and bray in copper-dust (and) apply.
  - 32. . . . thou shalt bray in copper-dust (and) apply.
- 33. . . . [the young of a raven], their eyes thou shalt put out with a dagger <sup>7</sup>; . . . the plants which the raven has brought to its young . . . its . . . thou shalt bray (and) apply.<sup>8</sup>

¹ Tašammat, A ← extraxit.

<sup>&</sup>lt;sup>2</sup> Pa'zute, of roses (AM. 80, 1, 5, see AH. 85), for pa'sute; E. xiii, 10.

 $<sup>^{3}</sup>$  PA = pašahu.

<sup>&</sup>lt;sup>4</sup> For BE = "roasted, burnt," see No. 35, 5. "Burnt copper," so frequently used for eyes in SM. (ii, 88 ff.) (المعالم ), is the "flower of copper" or "copper scale" of Pliny (NH. xxxiv, 24), procured by fusing copper, i.e. copper oxide (Roscoe, Treatise on Chemistry, ii, 421). On the other hand, we have "copper dust" frequently, which looks much like this "copper scale"; and Kü. may well have been right (iii, ii, 13) in seeing in it "old copper" especially as he quotes ii R. 30, 41, URUDU.KAK.KÚ.E = erů BE ša kakkaru ikulšu, "old copper which the earth has eaten" (cf. Pliny, NH. xxxiv, 20).

<sup>&</sup>lt;sup>5</sup> Ta-pa-a-a[s], E. xiii, 9.

<sup>&</sup>lt;sup>6</sup> Tetimmir, Del., HWB. 710; cf. 101, 2, iii, 3, ina bit papahi tetimmir, and KAR. No. 62 r. 14, ina nari tetimmir.

<sup>&</sup>lt;sup>7</sup> iši. κακ = šukurru, in Zimmern, Šurpu, iii, 28, parallel to paṭri šiparri; cf. Thureau-Dangin, Une Relation, 6, n. 2, where a mountain is compared to šelut šukurri, and further on, l. 378, 96 š. of silver are included in booty, and also in l. 393, 1514 š. of eri dannúti kallute and šelat š. eri dannúte. See also Holma, WB. 5-6. is a dialect word for a kind of dagger. Šukurri might perhaps be σάγαρις, the Persian dagger (Xen., Anab. 4, 4, etc.).

<sup>&</sup>lt;sup>8</sup> The recipe is similar to *SM*. ii, 662: "for darkness of the eyes. Take a young swallow and dig out its eyes, and tie a mark to it and let it remain in its nest for three days. When its mother cometh and seeth that it is blind, it will go and bring a certain root and put it on its eyes and they will be opened."

- 36. . . . kankadu-plant thou shalt bray, on the GIG-GIR <sup>1</sup> of his eyelids <sup>2</sup> [thou shalt place] . . . <sup>3</sup>, pith of a reed, seed of talupadi-plant, . . . of the left (?) which has borne twins, . . . barley-flour, gazelle-dung (?) <sup>4</sup> in a washing-basin thou shalt knead (?) <sup>5</sup>, . . . safflower-seed thou shalt roast, \*Arnoglosson. seed . . . [in] milk (?) together thou shalt bray, mix, in hot <sup>6</sup> attar of roses [thou shalt knead and apply] for fifteen days. \*Storax for three days thou shalt apply.
  - 43. . . . thou shalt bray, thou shalt blow into his eyes by a reed-tube.?
  - 44. . . . in oil thou shalt bray, apply: "Akkadian salt". . .
  - 45. (Dup. of No. 26, 8.)
- Reverse. No. 28, B. AM. 13, 6 (K. 6425 + 6652) (probably upper part of K. 2440, rev.).
  - 1. . . . to his eyes three times curd thou shalt bray, apply.
- 2. . . . [juice (tops)] of tamarisk, juice (tops) of laurel . . . [into] his eyes thou shalt squeeze. $^8$ 
  - 4. . . . thou shalt reduce, bray, apply.
  - 5. . . thou shalt bray, apply.
  - 6. . . . honey, curd into his eyes thou shalt pour.
  - 7. . . . wind goes not forth (?), . . . in honey thou shalt mix, apply.
  - 9. . . thou shalt weigh (?), apply.
  - 10. . . . dry in curd thou shalt mix, ditto.

<sup>&</sup>lt;sup>1</sup> GIG-GIR occurs Virolleaud, Babyl. i, 7, 79, "If GIG-GIR ina kakkad ameli šakin." From the GIG it is some sickness; it might be "wen" or "pustule".

² Huppi ênâ''-śu; so read from KAR. 182 r. 10, hu-up-pat ênâ ''-śu. Cf. also hu-up-ti ênâ''. No. 60 (AM. 94, 8, 22). See Holma, 17. Is it from און "edge, rim"?

<sup>3 . . .</sup> kiki kuppute.

<sup>4</sup> LA, properly "rind" or "shell", AH. 279.

<sup>5</sup> Ta-gal-lu-[ul?], from جَاتِ "to roll"? Cf. 13, 6, 9, and 36, 1, 7, for kal. It can hardly be ta-kal-lu "thou shalt roast" (cf. 1. 40).

<sup>6</sup> Sikruti (= "distilled"?), see No. 35, 5.

<sup>&</sup>lt;sup>7</sup> GI.SAG.TAR; see Thureau-Dangin, RA. 1920, 102; E. xiii, 12, n. 2. See also AM. 24, 4, 13; 26, 4, 4, 5; 27, 10, 9; 31, 5, 6, 7; 34, 5, 9; 35, 2, 5; 36, 1, 7, 13; 38, 4, ii, 8; 45, 2, 5; 55, 3, 8; 64, 1, 10; 81, 1, ii, 19; 81, 8, 12.

<sup>\*</sup> Tamaşa', コンコ "press out", or tamaza', with the same meaning (HWB. 396).

- 11. . . . \*Ricinus (?),¹ green thou shalt wash in water, pound; their water . . . thou shalt make to issue; the effluence ² (and) copper dust in equal parts thou shalt mix, bray in . . . and mountain honey, apply.
  - 13. . . . in harlot's 3 milk in equal parts thou shalt mix, bray, apply.
- 14. . . . thou shalt pour their water into a burzu-pot, . . . and take out, in copper dust (and) curd thou shalt bray, apply.
- 16. . . . [into] his eyes thou shalt pour, fat in copper-dust thou shalt bray, apply.
- 17. . . . and nettles in a stone mortar(?) <sup>4</sup> thou shalt bray; to the middle of his eyes [thou shalt apply] . . . magnetic oxide of iron, <sup>5</sup> root of male palm, . . . alum(?), separately(?) <sup>6</sup> thou shalt bray, apply.
  - 20. . . . fruit of poppy thou shalt pound, bray in oil, apply.
  - 21. . . . alum (?), curd, ditto.
- (The remainder, K. 2440, rev., AM. 10, 3, is much mutilated. For l. 2, cf. obv., l. 33; for l. 5, cf. obv., l. 17; l. 32, "\*storax and nettle-seed.")
- No. 28, C. AM. 15, 4 (K. 13393) (perhaps part of K. 2440; dup. (?) No. 26, a-e?).
  - 1. . . . cantharides (?), fat of "Long"-bone of . . .
- 2. Sulphide of arsenic thou shalt bray, through a re[ed tube thou shalt blow] . . .
- 3. Thou shalt bind wool-cardings (?) 7 to his head, ten *bur* of oil . . . [This] for three days thou shalt do; lolium . . .

<sup>&</sup>lt;sup>1</sup> "Bani-aşi. Is this "AG.UD, \*ricinus (cf. Br. 2775 and 7779)?

ישחלא Šihiltu שחלא.

I cannot help thinking that šamka, as used in this connexion in the Medical Texts, means nothing more than "woman" simply; SM. is insistent in its parallel use of "woman's milk" without any ulterior meaning. Indeed, the parallel word harimu, which gets the meaning of "harlot" (see, e.g., KB. vi, 1, 375), may well be merely the Arab (presuming that in this instance  $h = \mathcal{L}$ , as it apparently does sometimes). In the older edition of the Gilgamish Legend the form harlot takes the place of the later harlot it may be that the words are really not the same, and, recognizing the curious apparent inconsistency in the initials harlot in Assyrian, we may not be wrong in seeing the Syr.

<sup>4</sup> takbar. Du. E, probably the same as takbar. Du. A, CT. xviii, 32, iii-iv, 22, mi-sil (?)-tum.

<sup>&</sup>lt;sup>5</sup> See my On the Chemistry, 124.

<sup>6</sup> Ahê, also 96, 1, 4, in a similar connexion. Is it for Ahi-enna?

<sup>&</sup>lt;sup>7</sup> Kunšam, see AH. 43. Meissner, Bab. Ass. i, 254, "Knauel."

5. If a man's eyes hurt, the buds of green (?) corn , arsenic, tuškstone	a 1
7. If a man's eyes hurt, ten bur his temples (?)	
No. 29. AM. 8, 3 (79-7-8, 156) (probably part of K. 2570, No. 26; broken).	top
2 thou shalt spin separately (two kinds of threads), thou sh	alt
bind it on his temples.	
4 and hath no eye. Recite the Charm!	
5 of his right [eye ?].	
6 ra aš ta ma at ra aš. Recite the Charm!	
7 of his left [eye ?].	
8. [Incantation for the Sick Eye?]. Do as before.	
9 a basin thou shalt set, shall say	
No. 30. AM. 8, 4 (K. 11803), top broken.	
1. If ditto, flour(?)	
2. If a man's eyes	
3. If in his glance For his recovery, one shekel of	
5. If a man's eyes will not	
6. *Storax, stone of	
7. If a man's eyes seven days in	
8. If a man's eyes	
No. 31. AM. 8, 5 (K. 13719), top broken.	
1 cantharides (?) thou shalt apply to his eyes.	
3 tamarisk Nigella thou shalt wash his eyes antimor needle, thou shalt not take off.	. <b>y</b> -
7 asa foetida, Lolium thou shalt knead, bind on.	

<sup>&</sup>lt;sup>1</sup> Cf. (?) tuskû, Virolleaud, Babyloniaca, iii, 221: my Chemistry, 30.

- 9. . . . his eye . . . "salt of Akkad," . . . thou shalt bray . . . (as much as) seems good to thee <sup>1</sup> . . . thou shalt apply to his eyes, and he will recover.
- 14. . . . UMUN.PA.E (v. green kutra) . . . (it is) the Hand of Ishtar<sup>2</sup> . . . thou shalt put on the fire . . . apply, and he will recover.
- No. 32. AM. 8, 6 (K. 10892), top broken.
- 2. . . . his head thou shalt shave . . . , bray [needle(s)] of antimony, apply, wash off in water, roses on his eyes [thou shalt bind].
  - 4. . . . water (?) of mountain-honey in curd thou shalt mix [and apply].
- 5. [If a man's eyes] are affected, and šišitu 3 comes over the pupil of his eyes . . . gum of \*Pinus Halepensis, 4 Lepidium, seed of . . .
- No. 33. AM. 8, 7 (S. 1308), top broken.
- 1. . . . [in] curd thou shalt bray, three times in one month thou shalt apply: cantharides (?) in curd thou shalt bray, apply . . . [in mulu]-tinna 5
- ¹ Riš-ka ukal. Jastrow (Trans. Coll. Phys. Phil., 1913, 370, l. 4) had the correct reading, but his translation for "thy aching head" is incorrect. Ebeling (Arch. xiii, 143, CT. xxiii, 13, iv, 13) "(das) genügt (?) dir" is probably right. The phrase occurs CT. xxiii, 33, 12-13, tatar-ma tupaṣā taḥašal tašaḥal riš-ka ukal ina libbi ¼ ka telikķi "thou shalt dry it again and grind and strain (as much as) seems good to thee (?): therein thou shalt take ⅓ ka"; AM. 41, 1, iv, 29-30, "these eighteen drugs (with) one kisal (i.e. bur) of oil and cypress-oil thou shalt crush riš-ka ukal . . . (as much as) seems good to thee (?)." Cf. also 4, 5, 2 (duplicate of CT. xxiii, 13, 11-17); 65, 5, 6; 94, 9, 2. The phrase is paralleled in mukil gaggadišu, and mukil riš limutti, see MA. 380.
  - <sup>2</sup> For one form of "the Hand of Ishtar" = mania, see JRAS. 1924, 452.
- \* Šišitu or šilimtu also on 13, 7, 3, of the eyes. The problem is to settle whether this is the šišitu of Holma, 104 ff., "womb," or whether he is wrong in his translation. "Womb" is obviously impossible here. CT. xiv, 3, i-ii, 17-19, give ri-e-mu = ru-ub-şu, i-pu = i-ba-hu, ši-ši-tu = ,, for all of which (with another, silitu) Holma gives the meaning "womb". But rubsu, besides its probable equivalence with "mother", and "womb" "womb" (as he shows), has an undoubted value "dung" (cf. Langdon, Bab. Wisdom, 47, 1. 41, quoting BE. 31, 74, 42). In AM. this meaning is found, of asses, 15, 3 r. 12; 30, 1 r. 1; 99, 3 r. 10; of oxen, 13, 1, 5; 31, 2 r. 6, with urine of an ox, 1. 5; KIL-, 83, 1 r. 10, with A.GAR.GAR of a gazelle; of dogs and pigs, epir ru-bu-uş kalbi epir ru-bu-uş šahı, 98, 3, 17. (A.GAR.GAR is used for gazelle passim, and sheep, 69, 8, 8, the similarity of their dung being obvious. KU is used of a lizard, 8, 1, 29, and also of pig, 1, 2, 17; 103, 18.)

He quotes Boissier, Choix, i, 85 ff., šumma ba-mat marti ša imitti (šumeli) ši-ši-tum a-rim, and 92, šumma irru saḥirūti ênā pi-šu-nu ši-ši-tum ar-mu; and CT. xx, 6, Sm. 1412, 9-11, šumma GIR 2-ma elū (šaplu) ši-ši-tu a-rim. Hardly "womb" here. TE = šišitu, CT. xii, 11, 12a. Can it be connected with Ty "glass" (i.e. a film) or 222 "glue" (improbable, but cf. SM. i, 91, l. i)? Or is it the (white) spot which occurs in the pupil?

4 Or perhaps opium. The text is broken.

<sup>5</sup> BI.MULU.TIN.NA (10 tt. in AM.), MULU.BI.TIN.NA (1, perhaps 2 tt., 45, 5, 4; 89, 4 r. 6?). Drunk in prescriptions 36, 2, 7; 66, 11, 13; 67, 1, 7. Cf. ina tah-ri-iš MULU.TIN.NA ŠU, 4, 5, 3 (duplicate of CT. xxiii, 13, 11-17):  $\frac{1}{2}$  ka mi pa MULU.TIN.NA, 41, 1, iv. 20.

[beer] thou shalt knead, bind on his eyes: \*storax, Salicornia-alkali, \*Ricinus (?), without a meal . . .

- 3. . . . "salt of Akkad," sikti of roast corn thou shalt mix (?) . . .
- 4. . . . copper in anointing-fat 2 [thou shalt apply] . . .

No. 34. AM. 9, 6 (K. 16459): must be dupl. Kü. iii, iv, 5. L. 2, perhaps "vellow rheum in the eyes"; cf. No. 39. L. 4, MUS. DIM. GURIN. [NA], used for teeth in three out of the four instances in AM. (28, 1, 1; 30, 3, ii, 5; 105, 1, 15), and here for eyes. In Kü. iii, iv, 6, the epithet ritkubati is applied to it, and (ib. 25) there is a "large m." and (26) a "large m. of the desert". In 105, 1, 15, "If a man's tooth on the right side troubles him . . . the m. which run about the desert on his tooth he shall chew, gum of \*galbanum thou shalt put in his left ear." If it were not for the sign Muš which rather points to a snake or similar, I should have suggested the lady-bird. Mr. Sidney Smith tells me that he remembers seeing one in S. Babylonia; I have seen them in quantities inhabiting the low bushes in the Anatolian hills (see my Pilgrim's Scrip, 256), where it may be said definitely that they prefer to walk rather than fly. The lady-bird is particularly quoted for toothache in Fernie, Herbal Simples, 392, owing to a fluid which it secretes from its legs. On the other hand, AM. 28, 1, 2, seems to speak of the UD ša libbi-šu.

No. 35. AM. 10, 4 (K. 11695).

2. [If from a man's eyes blood has dropped (?)] and has stopped, the gall of a male sheep, the fat of . . . , \*Ricinus thou shalt bray in curd (and) apply . . .

<sup>4. [</sup>If from a man's eyes] blood has dropped (?) and has stopped, myrrh in . . .

<sup>5. [</sup>If a man . . . and] his eyes are troubled with blood dropping, \*ammi . . . , alum, tannin, together thou shalt rub . . . thou shalt wash (?) 4 knead, roast in an oven 5 . . .

¹ Sikti, applied to parched corn here, and in 31, 4, 9 "15 šE si-ik-ti 'ašagi 15 šE sik-[ti]" (cf. 44, 5, 6): zir epitati si-ik-ti (13, 2 r. 10): si-ik-ti 'šu- . . . (34, 1, 24), and saḥlê si-ka-a-ti (39, 1, 33), si-ki-te (81, 1, 4), [saḥlê] šAR BILp¹ si-ku-ti (75, 1, 31) (Ebeling, xiii, 11, "perhaps perfumed mustard (?)" whatever drug that may be).

<sup>&</sup>lt;sup>2</sup> Sāki, also 23, 10, 6. The root 770 "anoint" is found in Zimmern, Rit. 26, i, 24, i-su-ak.

<sup>3</sup> Itri, and 1, 5, ti-ri, אֹרָע (unless this latter be the Heb. מוֹצרה).

<sup>4</sup> Or "KA.LUH, asa foetida?

<sup>&</sup>lt;sup>5</sup> Ina? te-sik-kir. For the character which I have marked? (there being no instance given in Br. or SAI.) the variant, not only constantly in phrases throughout AM. but actually in duplicate texts (AM. 92, 4, 1, and Scheil, RT. xxiii, 1901, 134 ff., 4th paragraph), is IM.ŠU.RIN.NI = tinuru "oven", as might be guessed from the single character ("bread in an

- 9. [If from a man's eyes blood] has dropped and . . .
- No. 36. AM. 16, 3 (K. 3320) + 12, 3 (K. 2575) + 13, 1 (K. 8110) + 18, 2 (K. 2545) + 19, 6 (K. 2533). Col. i.
- 1. . . . these drugs . . . thou shalt put therein; to his eyes thou shalt apply; then . . . thou shalt put before his eyes; with rose-water thou shalt smear 1 his eyes . . .
  - 4. An eye-application for the Hand of a Ghost: Sulphate of iron,<sup>2</sup>...

enclosure"). (See E. xiii, 8; xiv, 40.) Moreover, AM. 15, 6, 7, gives ina? te-ip-pi "in an oven thou shalt bake" (and cf. a curious use 9, 4, 8). Te-sik-kir varies constantly in AM. with BE-ir, BE being sikiru sa mê (SAI. 872); E. (xiii, 8) showed that the variant tesikir might be connected with sikrute "als etwa gekocht" (cf. 78, 9, 6). Cf. ina? BE-ir GIBIŠ (DUL.DU) "thou shalt roast in an oven, take out" (40, 1, 53; 68, 1 r. 4; 70, 5, 17; 76, 2, 3; 78, 9, 6, dup. of 81, 2, 12; 83, 1, 21) and particularly ešteniš(niš) tabašal(šal) ina? BE-ir GIBIŠ "thou shalt boil together, roast in an oven, take out" (76, 2, 3), and "wash in water, roast in an oven . . . wash, ina? tatar BE-ir, in the oven again roast" (42, 1, 5). The intention is to inspissate or condense the liquid, and it is thus possible that sikru gets the derived meaning "condensed", e.g. in ina me kasi sikruti bahrute "in rosewater, hot" (80, 1, 10, see PRSM. 1924, 3), ina mê iše. Na. A sikruti tumašša'-šu "thou shalt rub him with inspissated juice of vitex" (79, 1, 15). (Compare also erû BE = burnt (?) copper, No. 28, A, 26. The root is probably the same as "scorched, heated" (Lane, Dict., 1379).)

¹ Tuḥap[u], ภูเก "rub".

<sup>2</sup> Tak Muza, also occurring PRSM. 1924, No. 13, 6, 11. This stone is used about fifty times in AM. and is written tak muzu, tak muzu, tak muzu; twice as "male" (7, 1, 10; 97, 4, 10); quantities, 1 šu, 30, 12, 5; 2 shekels (?), 62, 1, iv, 4; "fourteen muzu-stones," 47, 3, 9. In AM. it is almost always (if not always) used externally (cf. for the one possible instance of drinking, AM. 82, 4, 3); anoint, 29, 1, 5, 6; 33, 3, 6; 82, 4, 3; 89, 3, 3; 92, 4, 5; 94, 2, ii, 19; 96, 4, 7; anoint temples, 97, 4, 26; 102, 1, 16; 103, 22 (in oil on wool, 4, 6, 4; 20, 1, 15); for temples, 14, 4, 6; 102, 21; mouth, 78, 1, 29; eyes, apply, 14, 3, 8; 16, 3, 4; 19, 6, 12 (probably 12, 4, 4; 18, 9, 2); neck, 4, 6, 6; 7, 1, 10; ears, fumigate, 33, 1, 33; scorpion sting, anoint, 91, 1 r. 6; thread, put on neck, 47, 3, 9; šim matu, 92, 5, 4; for ghost, anoint, 93, 1, 3, 5, 7; probably 94, 7, 7, 8; 96, 4, 9; 97, 4, 8, 10; 103, 7; for ghost, 16, 3, 14; 19, 1, 11; 76, 1, 2. Its meaning is indicated by CT. xiv, 14, K. 4396, 8:—

takmu-zu ša lib u-ru-la-ti-šu pap-pal-tu ša bir-ki ameli takHAR siparri ameluti takbir-ki ameli

Cf. ib., 15, 31, 32, but separated from takmuşu, ll. 19, 20; and particularly 14, S. 995, r. 2, ser mu-u-[zu], as dup. of above. Note that these are texts containing explanations of mineral drugs.

Now there is no doubt that we have here a definite mineral muzu or muṣu, but the phrase in the religious text ZA. iv, 254, 11, indicates another side, mūṣu ša libbi urulati-šu ikkib ilāni "an issue from his foreskin is an abomination unto the gods". I agree rather with Jensen (KB. vi, 1, 374), who says it is probably "die stinkende Absonderung der Vorhaut", than Holma "the glans"; Ebeling (ZDMG. 1920, 187) is nearer, "Ausschlag (Ausfluss)." It is definitely a disease from KAR. 193, 12-15 (if a man's urine is like that of an ass, like yeast (dregs) of beer, of wine, še.tu (= šindu, varnish, Thureau-Dangin, RA. 1920, 66, 29, or paint, PRSM. 1924, 25) hi-li-ti (from hilu "gum"), i.e. "gummy varnish", that man is sick of muṣa).

L. 16 (dup. AM. 58, 6, 2, as pointed out by E. xiii, 132) "if a man's penis utakkasu (pricks him, smarts, lanca 'sting, prick') when he micturates (or?) ejects his semen, . . . his heart is 'caught', and he goes to a woman (and) is 'bound' (impotent?), 'white blood'

-stone, white mil'u-salt, black mil'u-salt, pearl, tops (juice) of the male mandragora . . .

- 6. All these eleven stones and drugs thou shalt put in water, set under the stars, . . . put in oil, anoint his eyes, put in beer and he shall drink . . .
  - 8. This in one month (and) twenty-one days . . . shall be healed.
- 9. If ditto, with "red stone", which is like opium, his eyes thou shalt anoint; If ditto, sulphate of iron, ditto.
- 10. If ditto, thou shalt bray ice (?) in curd, ditto; If ditto, thou shalt bray lapis lazuli from the mountains in curd, ditto.

(pus, gleet) continuously flowing from his penis, that man is sick of muṣa" (for his recovery \*storax is to be introduced into the penis by a catheter, and he is to drink some Solanum in mulu-tinna beer, and a bandage containing pine-turpentine, fir-turpentine, and juice of Nerium oleander (?) in fat is to be bound on the end of his penis). The symptoms agree well with those given in Quain (Dict. of Medicine, i, 541) for gonorrhœa: "smarting in micturition" and subsequently a "copious yellowish-green discharge". In muṣū, as Jensen saw, we have a definite medical equivalent for gonorrhœa (cf. NYID as an issue of mouth or lips), an abomination to the gods, as in Lev. xv. Cf. also AM. 62, 1, iii, 4, lu muṣu lu ku.gg. It is therefore not improbable that we have a pun in the vocabulary quoted above: "mineral drug for issue from his foreskin, pollution (pappaltu, NOO), Frank, Stud. i, 137; Holma, 97) of a man's penis: mineral HAR (takhar = erū, Schileico, ZA. 1914, 291) of bronze for (?) human beings = mineral for a man's penis." The scribe has attempted to derive muzu or muṣu, the mineral, from the disease gonorrhœa (muṣū, NY), for which I propose to show that the mineral is a cure.

Now the Greek  $\mu \ell \sigma v$ , with which musu has great apparent similarity, according to Pliny, (NH. xxxiv, 31) sparkles like gold, when broken, and has the appearance of chalcitis, when triturated. In other words, he connected it with copper (i.e. the Assyrian "takHAR of bronze for human use"). Bostock (Pliny, vi, 198) quotes Brongniart that  $\mu \ell \sigma v$  is perhaps mixed sulphate of iron and copper; Berthelot (Hist. des Sciences, ii, 131) makes it sulphate of iron (more or less oxidized and basic, resulting from spontaneous decomposition of pyrites). Either sulphate of copper or iron will do as a remedy for the diseases quoted: the former for ulcers, as an injection for gonorrhæa, and as an astringent application to the eyes (P. 466), and the latter for amenorrhæa (internally), as a lotion for ulceration (externally), and as an injection for urethral and vaginal inflammations (P. 531). But whichever it be, musu was certainly used for the same diseases as  $\mu \ell \sigma v$ , which is prescribed by Pliny (ib.) for diseases of the male generative organs, on wool for ulcers of the head, as an injection with oil of roses for ears, for granulation of the eyelids, for tonsils, etc. Clearly  $musu = \mu \ell \sigma v$ , both as a word and as a remedy, and it is almost certain that  $\mu \ell \sigma v$  must have been borrowed by the Greeks from Assyria.

The quotation given above about the "issue from his foreskin" is no little evidence that the people who originally wrote this did not practise circumcision.

Note CT. xiv, 15, 19, 20, the male and female muşu-stone. Meissner (Bab.-Ass. i, 350) points out that there is a Muşi-mountain mentioned by Shamshi-Adad, iii, 37, probably southwest from the Afshar Mountain.

- <sup>1</sup> On the exact meaning of mil'u see my Chemistry, 27.
- <sup>2</sup> Lulu, وَا عُلُوا وَ . For pearls in eye-medicaments, see SM. ii, 101, 102. Cf. No. 44, 12.
- <sup>3</sup> Not  $tak_{GUG}$ , "cinnabar." At the same time cinnabar is used for eyes: SM. ii, 88, 98, etc. See AH. 46; opium is a hard, red-brown drug.

- 11. If ditto, carbonate of copper, ditto; If ditto, thou shalt bray kohl in harlot's milk, anoint his eyes.
- 12. If ditto, thou shalt bray black iron-oxide 3 in "mountain-oil" (petroleum), ditto.
- 13. Fir-turpentine, a little of some drug against pain,<sup>4</sup> \*storax, . . . roses, fat of reeds, magnetic iron ore,<sup>5</sup> sulphate of iron, oil of . . . , old shell,<sup>6</sup> wax, these eleven drugs as a mixture against the Hand of a Ghost thou shalt . . . , and apply to his eyes and he shall recover.

  Col. ii.
- 1. . . . and cannot perceive, it is the Hand of Ishtar . . . , and in curd thou shalt bray, apply to his eyes and he shall recover.
- 3. . . . cannot sleep, out of all proportion (?) 7 they (his eyes) are heavy . . . , in curd (and) mountain honey thou shalt mix (and) apply.
- 5. [If the . . . of a man]'s eyes is obscured (?), and the bed in the night (?) he cannot lift up, thou shalt roast juice (tops) of *Vitex agnus castus*, juice (tops) of figs, . . . , juice (tops) of nettles in water in an oven; (then) pour it thereon: . . . cattle-dung together thou shalt pound (and) strain, mix with flour of roast corn, knead in rose-water, bind on: \*Ricinus he shall drink in beer, and he shall recover.
- 8. If a man [can see] nothing [by day], (but) can see everything by night, (it is called) "Sin-lurmâ". 11
- 9. If a man can [see] everything [by d]ay, (but) can see nothing by night, (it is called) "Sin-lurmâ".<sup>11</sup>

<sup>&</sup>lt;sup>1</sup> Tak Mušgarru, malachite. See my Chemistry, 94.

<sup>&</sup>lt;sup>2</sup> GAB wrong; read <sup>8</sup>BI.ZI.DAM, i.e. ii R. 30, 3la,  ${}^{8}BI.ZI.DA = SU-u$ , and 33a, which must be  ${}^{8}BI.ZI.DA = guhlu$ .

<sup>&</sup>lt;sup>3</sup> Takka.MI. See my Chemistry, 122.

<sup>4</sup> Cf. AM. 89, 4, 5.

<sup>&</sup>lt;sup>5</sup> Takka.GIN.NA.DIB.BA. See my Chemistry, 124, and cf. SM. ii, 707.

<sup>6</sup> Cf. AM. 13, 3, 3,

<sup>7</sup> Eli minate-šina,

<sup>&</sup>lt;sup>8</sup> Šaddu, perhaps سُدٌ "close up, obstruct".

<sup>9</sup> Or "in his sight" (?).

<sup>&</sup>lt;sup>10</sup> Or does it mean "distinguish"? By comparison with the succeeding text it refers to night-blindness.

<sup>11</sup> Sin-lurmâ, the name of the disease, just as others are called "Hand of Ishtar", etc. As it stands, there is no sense in Sin-lurmâ ("may the moon dwell (?!)", or similar); a clue is furnished by l. 10, where obviously either si-lu-ur-ma-a (the verb denoting this particular form of eye-disease) is merely "Sin-lurmâ" formed into a quadrilateral, or "Sin-lurmâ" is a folketymology from silurmâ. The former is the more probable; as a matter of comparison merely,

10. If a man's eyes suffer from "Sin-lurmâ" 1 (night-blindness), thou shalt thread makut 2 of the liver of an ass (and) flesh of its neck on a cord (and) put it on his neck, prepare a water-pot 3; on the morrow thou shalt spread a cloth in the sun, prepare a censer of pine-gum: (then) thou shalt let this man stand behind the cloth in the sun. A priest shall take seven (rounds of) bread; 4 he whose eyes are sick shall take seven (rounds of) bread: [(then) the priest] shall say [to] the sick man, "Receive, O clear of eye:" [the si]ck man shall say to the priest, "Receive, O dim 5 of eye" (Col. iii, 1). . . . Thou shalt chop up 6 the makut of the liver . . . , assemble some children and they shall say thus: ". . .", they shall say: thou shalt mix curd and the best(?) oil together, apply to his eyes.

### 4. [Ritual for] this: as before.

- 5. [Charm:]... receive: may Ea hear, may Ea receive... [Do not se]e, O clear of eye: see, O dim of eye. Recite the charm.
- 7. ... <sup>7</sup> and this charm . . . of the door(?) thou shalt put in his hand and he shall eat.

it is interesting to see how Sin could take over its form Sî' in the West (see Johns, Liber Censualis, and my chapter in Woolley, Carchemish, ii, 135). At all events, we may sum it up that "Sin-lurmd" means "night-blindness", or something like it, and that it was slurred into a quadriliteral  $s \cdot l \cdot r \cdot m$ . (Cf. the similarity of remedies in Syriac and Assyrian in n, l, p. 14.)

But out of this word arises the probability of the derivation of Difference been satisfactorily explained. Obviously it is not a Hebrew word: it occurs three times in the Old Testament, once at night ("so that they wearied themselves to find the door", Gen. xix, 11), and elsewhere (2 Kings vi, 18 bis), of temporary blindness. Its likeness to Sin-lurmâ, silurmâ, is most striking, particularly as Sin becomes Dalso in Difference. Note also W. Smith, Dict. of the Bible, ii, 418: "The idea expressed in Ps. cxxi, 6 ('The moon shall not smite thee by night') may have reference to the general or the particular evil effect; blindness is still attributed to the influence of the moon's rays on those who sleep under the open heaven, both by the Arabs (Carne's Letters, i, 88) and by Europeans." I was myself told by my Arab camel-man in Sinai that a headache which I happened to have one day was caused by my sleeping with my head unprotected from the moon.

<sup>&</sup>lt;sup>1</sup> Si - lu - ur - ma - a: see preceding note.

<sup>&</sup>lt;sup>2</sup> Makut: makutu, near dilutum "bucket" (MA. 540): 戊氧氧٤ = "ship". But these are hardly likely as explanations; "strips" or "pieces" would suit the context, but even if it were makkutu, □□□ would hardly provide a good philological comparison. The solution would agree with SM. ii, 663, but not with the ultimate procedure. Gabidu, for kabidu; cf. SAI. 6420, 6421, HAR = kabidu, kabittu.

<sup>3</sup> Agubbû.

<sup>&</sup>lt;sup>4</sup> Cf. Ebeling, MDVG. 1918 (ii), 33, l. 18 ff., 7 ta-a-an GAR. MEŠ ina pitilti tašakkak(ak).

<sup>&</sup>lt;sup>5</sup> Balsa îni, obviously in contrast to namra îni. Cf. balsa îna-ka, PSBA. xxi, 41.

<sup>&</sup>lt;sup>6</sup> Taḥarraṣ (cf. hirṣi, r. 9). Cf. note 7.

<sup>7...</sup> SU.SI ha-še-e telikki. HAR = liver and hašū: SU.SI is part of the liver (Jastrow, PRSM. 1914, 121). But this hardly agrees with the procedure of cutting it up.

9. . . . thou shalt [take away?] the *makut* of the liver, and the pieces thou shalt . . . [and] thou shalt anoint his cheeks and [eyes] and he shall recover.<sup>1</sup>

Col. iv.

- 1. . . . pine-turpentine, fir-turpentine, . . . -plant, . . . , lolium, a drug for pain, sulphur, \*borax,² \*asphalt,² . . . together thou shalt pound, therein antimony thou shalt put, and thy finger <sup>3</sup> ? ?
- 5. . . . Lolium, hellebore, \* maštabba-plant, fir-turpentine, wax, \*ammi, fat of \*opopanax, seed of pine.
  - 6. Eight drugs, a compound for eyes.
- 7. \*Ammi, Lolium, roses, asa foetida, hellebore, maštabba-plant, tannin, fir-turpentine, mustard, on the fire thou shalt boil, in oil and wax of white honey apply.
  - 9. Nine drugs, for mixing a salve.
- 10. <sup>5</sup>\*Ammi, hellebore, roses, *maštabba*-plant, myrrh, seed of pine, shoemakers' tannin, seven drugs a compound for eyes, at the fire thou shalt roast, in fat, wax and curd thou shalt bray, apply to his eyes.
- 12. Black *mil'u*-salt, powdered arsenic,<sup>6</sup> sulphate of iron, *Salicornia*-alkali, fir-turpentine, \*storax, *Lolium*, tannin, sulphur, ox-fat, antimony, "needles" of antimony, šu.Mulu <sup>7</sup>...
- 14. Black mil'u-salt, sulphur, bitumen . . . , Nigella, roses, Lolium . . . ox-fat, marrow of "long" bone . . . a needle (?) . . .
- No. 37. AM. 12, 4 (K. 4120) (similar in part to 18, 9 (K. 9503), preceding 12, 7, K. 10790).
- 1. If a man's eyes are troubled thou shalt bray white honey in curd (?) [and apply].

 $<sup>^1</sup>$  For this treatment of night-blindness, cf. SM. ii, 97, for the same complaint, where the liver of a goat (or stag) is to be roasted, and when half-cooked the gravy is to be smeared on the eyes; and especially 663, where the liver of a horse is to be cut up, roasted, and then chopped fine and smeared on the eyes with oil of musk.

<sup>&</sup>lt;sup>2</sup> See my article, JRAS. 1924, 454.

<sup>&</sup>lt;sup>3</sup> Cf. 77, 6, 7, and 101, 3, iii, 13.

<sup>&</sup>lt;sup>4</sup> See my article, JRAS. 1924, 669.

<sup>&</sup>lt;sup>5</sup> Cf. for this receipt AM. 8, 1, 17, and Scheil, RA. 1921, xviii, 1, p. 6.

<sup>&</sup>lt;sup>6</sup> Some form of the yellow sulphide; PRSM. 1924, 25.

<sup>&</sup>lt;sup>7</sup> See No. 28, A, 1, n. 1.

2. (Cf. 18, 9, 1 ff.) When his eyes perceive a dazzling (?), 1 it is the hand [of a ghost ?] . . .; for his recovery, magnetic iron ore, mineral of lead, mil'u-salt, [black mil'u-salt ?], sulphate of iron, sab-stone, lapis lazuli, šubū-mineral 2 bal-mineral, male copper, 3 . . . tamarisk-seed, laurel-seed, seed of male Cyperus, arsenic 4: [these drugs together thou shalt pound (and) make] fine, 5 in suet of the kidney of a black ox like tannin on copper thou shalt bray and [apply continuously to his eyes, and he shall recover]. 6

pine-turpentine (?) as a fumigation [thou shalt fumigate] his eyes and temples.

- 7. [When ditto ?], tamarisk-seed, laurel-seed, seed of [male] Cyperus . . .
- 9. [If the hand] of a ghost seizes him and before his eyes [it is] like a light . . . becomes like a goat(?), that man . . .
- 11. . . . pine-turpentine, fir-turpentine . . . thou shalt bray together
- No. 38. AM. 18, 9 (K. 9503, here for comparison).
- 2. . . . black [mil'u-salt], sulphate of iron, SAB-stone, cinnabar, . . . , green verditer, tamarisk-seed, laurel-seed . . . these . . . drugs together thou shalt pound (and) make fine, in suet of the kidney of a black ox [like tannin on copper thou shalt bray and] apply continuously [to] his [eye]s, and he shall recover.
- 6. . . . three times thus let him say: "Of Bêl and Beltis [the servant?] am I" he shall say and shall recover.
- 8. Thou shalt take a . . . which stands (?) . . . roast it over the fire, bray (it) [in] honey (and) curd, apply to his eyes, and he shall recover.
- No. 39. AM. 12, 6 (K. 3662).
- (1-6. Various drugs, including ur(?)zini, turmeric, eruca, to be kneaded in cold water and bound on for fifteen days.)

<sup>1</sup> Bursa; cf. Enuma na ina ênâpi-šu bir-şi . . . , 85, 2, 4. Doubtful; hardly losses. Birsu, of stars rising (MA. 193), here perhaps the sudden dazzling of the eyes which sometimes temporarily obscures the sight.

<sup>&</sup>lt;sup>2</sup> Vitriol, see my Chemistry, 110.

 $<sup>^3</sup>$  Cf. "male and female hæmatite" (Duval-Berthelot, Hist. des Sciences, ii, 163, quoting Bar-Bahlul) and  $AM.\ 7,\ 1,\ 10.$ 

<sup>&</sup>lt;sup>4</sup> See No. 36, iv, 12.

 $<sup>^5</sup>$  Tadalul (cf. 18, 9, 4). Does this replace the usual NAM (cf. NAM.TIG = dullulu, Br. 2156) ?

<sup>&</sup>lt;sup>6</sup> See Pliny, NH. xxxiv, 32, on chalcanthum, green vitriol or sulphate of the protoxide of iron, for eyes (Bostock), i.e. ferrous sulphate.

- 7. [If a man]'s eyes are full of yellow rheum, thou shalt bray pomegranaterind <sup>1</sup> [and apply].
- 8. If a man's eyes are full of yellow rheum, thou shalt bray pomegranate-skin [and apply].
- No. 40. AM. 12, 9 (K. 13439, probably part of No. 26, K. 2573).
  - L. 6. "Incantation for failing eyes, for eyes . . . "
- L. 7 ff. "Ritual for this: thou shalt take seven grains of Andropogongum(?)... in the night on the roof(?) before the star... In the morning before the sun riseth..."
- No. 41. AM. 12, 11 (S. 1156, now joined to K. 2354, CT. xxiii).
- No. 42. AM. 13, 2 (K. 2444). (Obv. mutilated.)
  Rev.
  - 1. Cantharides (?) . . .
  - 2. Antimony in fresh (?) curd . . .
  - 3. If a man's eyes a film<sup>2</sup>...
  - 4. If a man's right eye a film 2 . . . , with a bistoury . . . 3
  - 6. If a man's left eye a film 2 . . . , with a bistoury . . .
- 8. If a man's eyes are sick . . . [thou shalt pound] the brain of an eagle in harlot's milk [and apply].4
  - 10. Nettle-seed sikti <sup>5</sup> . . .
- 11. If the pupils of a man's eyes a film (?) . . . thou shalt apply to his eyes. If ditto, gum of . . .
  - 13. [If in] the eye of a man a film . . .
- No. 43. AM. 13, 3 (K. 6974).
  - 2. If a man's eyes . . . old shell of Concha Veneris (?) 6 . . .

<sup>&</sup>lt;sup>1</sup> Cf. AM. 9, 6, and Kü. iii, iv, 5. BAR = kuliptu (SAI. 1059) =  $\Delta \Delta \Delta$ ; either rind or bark (cf. my article JRAS. 1924, 454, where it is used of tamarisk). Pomegranate-rinds are included in a prescription in SM. ii, 93, when there is excessive rheum in the eyes. Note the difference in Il. 7, 8, which may be due to a perfunctory and slavish copying while collecting receipts from different sources. LA, AH. 279. I see that Ebeling, Arch. xiv, 1923, 28, had already suggested "pomegranate" as possible for nurma, comparing Armenian. This suggestion must be taken, so far as it goes, to anticipate my AH. (1924), 175.

<sup>&</sup>lt;sup>2</sup> giš.mi, see *PRSM*. 1924, 28, n. 9.

<sup>3</sup> Is this an operation for cataract or similar eye-trouble?

<sup>&</sup>lt;sup>4</sup> Cf. SM. ii, 706, a raven's brain rubbed on eyes, to see stars in the day-time.

<sup>&</sup>lt;sup>5</sup> See No. 33, 3.

<sup>•</sup> LA labira(ra) ša kibda . . . (كلدة).

- 4. If a man's eyes bulge  $(?)^1$  . . . the eye the dimness of the upper part  $(?)^2$  . . .
- 6. If ditto, thou [shalt boil] Lolium in milk 3 . . . fat of opopanax, hellebore, . . .
  - 8. If ditto, corn-bread . . .
  - 9. . . . Lathyrus-flour, fenugreek-flour, . . .
  - 10. If ditto, Ferula communis . . .
- No. 44. AM. 15, 6 (K. 1845) + AM. 13, 7 (K. 9247). Col. i.
- 3. . . . in oil and copper-dust . . . in oil, copper-dust thou shalt bray, apply: honey . . .
- 5. . . . Solanum, green thou shalt press, 4 its water in . . . in copperdust and oil [thou shalt bray, apply].
- 7. Thou shalt bake . . . kaz in an oven, (until) there is not much (left) . . . alum, \*storax, roses, in curd [thou shalt bray, apply].
- 9. . . . [thou shalt] reduce, bray, as an application thou shalt put it on . . .
  - 10. . . . roses, roast fresh Lolium, in a cup thou shalt mix, [apply].
  - 11. Thou shalt bray . . . roses in milk, [apply] to his eyes.
- 12. Thou shalt reduce black mil'u-salt, bray in curd, apply: If ditto, thou shalt bray a pearl <sup>5</sup> in marrow of a sheep-bone, apply.
- 13. Thou shalt lay up a . . . -fish (?) in salt until sunrise, and (then) take it out, bray (it) in oil (and) copper-dust, apply.

<sup>&</sup>lt;sup>1</sup> Suhhuta. Sur = sahatu (Br. 2984): 'karanu Sur. (RA) (40, 4, 9; 50, 5, 3; 82, 2 r. 11) and amelsahit karani (Br. 5011) are various forms in which it is used. "Press out" appears correct from 14, 3, 7, where a plant, still green, after being brayed, "its water sur-at": cf. also 25, 6, 13. It is used of eyes, êne-šu ussahata (MA. 873).

<sup>&</sup>lt;sup>2</sup> Does this refer to detachment of the retina, the first symptom of which is the loss of the field of vision, upper or lower (Quain, *Dict. of Medicine*, 1883, i, 487)? On DUL-ma see *PRSM*. 1924, 24, n. 5. It is a noun in 9, 1, 37, and 106, 2, 1; a verb in 8, 1, 22.

<sup>S Cf. 8, 1, 20.
4 Tuhasa. In PRSM. 1924, 12, n. 1, I thought that tuhasa was the same as the Arab "mix". But from a comparison with AM. 13, 6, 11, where the green plant is to be pounded, I am inclined to compare it to "press, squeeze", in spite of the sibilant.</sup> 

<sup>&</sup>lt;sup>5</sup> See No. 36, 4.

JA-H 2\*

14. . . . upon a bronze blade in curd thou shalt bray, apply.

Col. ii.

- 2. . . . gum of \*galbanum . . .
- 3. If a man's eyes  $\check{s} i \check{s} i tu^1 \dots$
- 4. If a man ditto, one shekel of cantharides (?) . . .
- 5. If a man ditto, one shekel of cantharides (?) in curd thou shalt bray, apply: fifteen grains . . .
  - 6. \*\*Calendula in curd [thou shalt bray, apply].
- No. 45. AM. 14, 1 (K. 8349) (possibly the same tablet as AM. 18, 6, K. 8832).
- 1. ... "long" bone ... in equal parts thou shalt bray, in honey, curd, oil of cedar, copper-dust ... [apply].
  - 3. . . . with roast corn thou shalt bray, pour on his eyes.
- 4. . . . wax together thou shalt mix, in fat of "long" bone thou shalt bray, apply.
- 5. [If a man's eyes] . . . [and] he [cannot] distinguish . . . , that man's visitation(?) <sup>2</sup> is old and his eyes are failing, . . . thou shalt bray in curd, apply to his eyes.

<sup>&</sup>lt;sup>1</sup> See No. 32, 5.

<sup>&</sup>lt;sup>2</sup> KI, frequently in these texts with *mišiţti*; the reading is shown 82, 2, 7. Ana amela ši-pir mi-šit-ti šup - šu - hi u ri- mu- te . . . Šipru, lit. "a sending," i.e. a happening, accident, visitation: "to heal a man of the visitation of a blow." With the present passage (in which it might perhaps equally well be translated "functions") cf. 90, i, iii, 16, šumma KI-su iltabir. At the same time I am not at all certain about this rendering.

Mišittu means "a stroke" (of paralysis) in Bab. Chron. iii, 20, where Menanu, the king of Elam, mišittum imišidsu-ma, his mouth is stopped and he cannot speak, and he dies within the year. But 79, 1, 11, šumma NA mišitti kabli GIG atallukam la idi "If a man is hurt by a blow on the loins, (so that) he cannot walk," followed by elaborate poulticing and massage, appears to be much less serious than paralysis of the lower limbs. The following are examples: šumma NA mišitti pani išu ši-šu i- . . . "If a man has a blow on the face, his face . . . " (76, 5, 11); [šumma amelu (?)] mišitti pani mašid-ma talamma-šu išammam-šu "[If a man (? 1)] has been struck a blow on the face and its surrounding (flesh) poisons him" (77, 1, 1, talammu from למה, like tabannu from נבנה); (ib. l. 2) . . . mišittu imšid-su-ma lu imitti lu šumeli PA-is . . . " a stroke has struck him and either right or left is stricken (?) . . . "; šumma na mišitti kišadi gig "if a man is hurt by a blow on the neck" (79, 1, 9); similarly on the foot (1.24), or on the side (ahi, 1.21); šumma NA mišitti TE iši(5i) (79, 1, 6), or GIG (76, 5, 9). or inim. Inim. ma šumma na mišitti te iši (76, 5, 4). Summa na mišitti ammîti gig (79, 1, 17, cf. 77, 1, 7, 9) looks rather like a ghostly attack than paralysis like death. In some cases the verb appears to be absent: šumma NA mišittum - ma kat-su u šepî-šu . . . (82, 2 r. 8, cf. obv. 4) mišittu-ma; also l. 1); UL mišitti murus-su (50, 4, 7, cf. 6).

- 7. . . . pine-turpentine, fir-turpentine, flour of roast corn thou shalt pound, sift, mix in beer, bind on his eyes.
  - 8. . . . an application 1 to the eyes.
- No. 46. AM. 14, 3 (K. 5415 A), probably same tablet as AM. 14, 2 (K. 11723).
  - 2. . . . mercury, \*liquidambar . . .
- 3. . . . pine-turpentine, fir-turpentine, kelp(?), asa (dulcis) thou shalt bray, in a copper [pan(?) thou shalt mix] . . .
- 4. . . . mustard, \*\*Calendula, \*corn-marigold, tarhu on his neck [thou shalt put] . . .
- 5. . . . SAB-stone thou shalt bray, put in oil, anoint the middle of his eyes . . .
- 6. . . . thou shalt apply, with tamarisk-water for twenty days thou shalt wash his eyes, and the tamarisk-water three times thou shalt pour away, and he shall recover.
- 7. . . . green thou shalt bray, its waters thou shalt press, leave it under the stars, ditto.<sup>2</sup>
- 8. . . . sulphate of iron, tamarisk-water which has been set on the fire and . . . has been taken out therefrom, fat of a gazelle's bones together thou shalt bray, apply . . .
- 10. (Cf. KAR. 205, 4.) . . . cattle-dung, mustard, hellebore in wool thou shalt roll, put on his neck [and he shall recover].
- 11. [If] either (a demon of) evil intent, or . . . , or anything evil <sup>3</sup> . . . seize him, for his recovery [thou shalt do this].
- 13. Thou shalt take . . . , on a thread of white wool thou shalt thread it: laurel(?)-root, . . . garlic, asa (dulcis), sulphur, alkali, these seven drugs

KI occurs as follows with mišitti: šumma KI mišittu ša pî-šu DIB... "if the accident of a blow on his mouth has fallen upon him "(78, 1, 5); [šumma] KI mišitti ša miḥri TAK "If the accident of a blow on the miḥri (Holma, 158) has happened "(77, 5, 17, cf. 16: 76, 2, 8, GAB.RI-tum); šumma KI mišitti ša arki TAK (a blow on the back) (77, 1, 11); [šumma amelu (?)] mišitti pani mašid-ma talamma-šu išammam-šu KI [ka (?)]-bar-ti ["If a man (?)] has been struck a blow on the face and its surrounding (flesh) poisons him, it is the accident of a swelling (?)" (77, 1, 1); INIM.INIM.MA KI mi-šit-tu... (60, 3, 8) followed by šumma KI NA maš-di ša GAB.RI... zu (l. 9) without mišittu"; šumma ana KI kat edimmi la-az... "If for the visitation of the hand of a ghost... (95, 1, 4); cf. 99, 3 r. 11, Ana KI kat edimmi la-az-zi.

<sup>1</sup> Tipu, cf. AM. 16, 1, 10, annu ti[pu ša ênâ<sup>II</sup>], perhaps 9, te-pu; KAR. 191, iii, 10, of drugs as ti-pu ša KU.GIG; AM. 15, 6, 9, kima tipi te-ti-ip-[pi], 24, Pa. imposuit (medicamentum) as in PRSM. 1924, 27, n. 1.

<sup>&</sup>lt;sup>2</sup> Cf. 25, 6, ii, 13.

<sup>3</sup> KAR. 184 rev. 2.

. . . thou shalt fold wool: as [thou foldest] the folds, thou shalt recite [the charm] "May . . . give thee rest", the neck . . .

- No. 47. AM. 14, 2 (K. 11723, see preceding).
  - 4. [Incantation against] (a demon of) evil intent . . .
- 5. . . . on a thread of red wool thou shalt thread; the drug . . . , Crataegus azarolus (?), kanšam-plant, tamarisk-seed . . . on his forehead thou shalt bind . . .

(See also AM. 48, 7, and 76, 1.) <sup>1</sup>

- No. 48. AM. 16, 1 (K. 2500 + 7933) (follows AM. 12, 1, in the same series). Obverse.
- 1. [If a man's eyes] are full of . . . , thou shalt mix Lolium (and) flour of parched corn in beer and bind on: for three days to his eyes [thou shalt do this], renewing <sup>2</sup> (it) thrice daily; on the fourth day thou shalt surround <sup>3</sup> his eyes with suadu (and) opium, water in . . .; . . .(?) . . .(?) of clay <sup>4</sup> and once, twice, or thrice his eyes thou shalt press: marrow of gazelle-bone to his eye [s thou shalt apply]. Then in opium thou shalt bray antimony (and) apply it to his eyes; thou shalt bray \*\*gall-apples (and) apply dry to his eyes.<sup>5</sup> Thrice daily thou shalt renew (it); thou shalt mix a paste <sup>6</sup> of mazi(?), barhuš (v. tamarisk), seed of kutru, . . . , parched corn, Lolium; apply it dry to his head, bind his head, and for [three] days [do not take off]. On the fourth day thou shalt take it off and shave his head: apply thy paste to his eyes, [and he shall recover].
- 8. \*Storax, cantharides(?), "salt of Akkad," alum, Salicornia-alkali, myrrh, sediment of the river(?) 7 roses, total eight drugs as an application for when the man's eyes are scorched by the sunlight 8 and . . .
  - 10.9 \*Storax, alum, "salt of Akkad"; this is an application for the eyes].
- 11.10 Fir-turpentine, flour of roast corn, roses; this is an [application for the eyes].

<sup>&</sup>lt;sup>1</sup> Note that AM. 14, 7, is the tablet next following Kü. iii, and may be part of the same tablet as AM. 99, 3; 15, 3, has been joined to 73, 1; 15, 2, has been joined to K. 2574 (CT. xxiii. 39 ff.).

 $<sup>^{2}</sup>$  ŠAR = uddušu, SAI. 2840. Cf. PRSM. 1924, 4, n. 3.

<sup>3</sup> Takaddad: kadâdu and kamû are both translations of BAR (Br. 1758, 1759).

 $<sup>^4</sup>$  Cf. SM. ii, 70, "if it be necessary to treat the whole head, we smear it over with clay mixed with vinegar."

<sup>&</sup>lt;sup>5</sup> Cf. 92, 8, 9.

<sup>&</sup>lt;sup>6</sup> Ulap; see JRAS. 1924, 453. Mazi, doubtful.

<sup>&</sup>lt;sup>7</sup> See No. 62, n. 1.

<sup>&</sup>lt;sup>8</sup> See AM. 20, 2, 7; 39, 1, 41; 41, 3, 7, 9.

<sup>9</sup> Dup. KAR. 183, 9.

<sup>10</sup> Dup. KAR. 183, 7.

- 12. [If a man]'s eyes have a dazzling (?), he shall go to another house, and the door being shut as if . . . the dazzling (?), ditto, "Away with your dazzling (?)!" [he shall say].
- 14. [If ditto], he shall go to [a house] of darkness <sup>2</sup> and the door being shut as if . . . the dazzling(?) ditto, "Away with your dazzling(?)!" [he shall say].
- 15. [If there be on a man]'s eyes a film,<sup>3</sup> fir-turpentine, pine-turpentine, gum of \*Pinus Halepensis, seed of . . .
- 17. [If within a man]'s eyes hair sprouts and his eyes hurt, salt, tannin (v. ...), fat of ... alum, in equal parts thou shalt bray, mix in curd, apply to his eyes ... <sup>4</sup>
- 19. [If a man]'s [eyes] are full of flesh growing  $^5$  . . . nettle-[see]d in honey thou shalt bray, apply :
  - If [ditto] . . . arsenic 6 in curd thou shalt bray, apply: If [ditto] . . .
- 22. [If a man]'s [eyes] are full of flesh growing and matter (?) <sup>7</sup> comes, for his recovery . . . \*opopanax, \*storax, cantharides (?), salt . . . [in blood] of cedar or in oil of cedar thou shalt mix, apply . . .
- 25. [If a man]'s eyes are full of flesh and blood, . . . cantharides (?), Lolium, these drugs . . .
- 27. [If a man]'s [eye]s are full of  $gukani^8$ ... seven days on the threshold (?) . . .
- No. 49. AM. 17, 1 (K. 6560) + No. 8, AM. 3, 5 (PRSM. 1924, 13) (possibly belonging to K. 7953, AM. 64, 1).
  - I, 2. (For itch, probably) . . . with Uš.GUL 9 thou shalt anoint: the

<sup>&</sup>lt;sup>1</sup> G(k,k)iddag(k,k)ida.

<sup>&</sup>lt;sup>2</sup> A tomb?

<sup>3</sup> Libištum, lit. "a covering, tunic."

<sup>&</sup>lt;sup>4</sup> Cf. SM. ii, 102, "Now as concerning the superfluous hairs which grow inside the eyelids and pierce the eyes."

<sup>&</sup>lt;sup>5</sup> Cf. the use of 귀한다 in Jer. xii, 2; Ho. xiv, 3. For the disease cf. SM. ii, 659, "For the eyes which have flesh in them."

 <sup>6</sup> See No. 36, iv, 12.

 $<sup>^7</sup>$  U (?) (= damu: sarum, Br. 8739; cf. the U in U.BU.BU.UL = probably bubultu "ulcer" (see Kü. iii, i, 8; Holma, 150; E. xiii, 132). Cf. AM. 20, 2, 5, 7.

<sup>&</sup>lt;sup>8</sup> Gukani, cf. CT. xxiii, 23, 2; my translation, AJSL. 1907, xxiv, 338; Jastrow, duplicate, Trans. Coll. Phys. Phil., 1913, 375; Daiches, ZA. 1912, 382. مراجع المنافعة is a worm, but although SM. ii, 665, prescribes for worms in ears, there is nothing similar for eyes. It cannot be gagla of SM. ii, 100?

<sup>&</sup>lt;sup>9</sup> Cf. 5, 5, 2.

skin of an ass in fire thou shalt reduce, bray, apply 1: hay in fire thou shalt reduce, apply to the affected surface 1 with ta'a (fat?) of a male sheep anoint the affected surface: leather thou shalt dry, pound, 2 [apply]: ... "ox of the river" in fire thou shalt reduce, apply to the affected surface: \*\*Calendula thou shalt bray, anoint the affected surface: ... thou shalt rub, thou shalt cover(?) 4 the affected surface with a gold ring.

- II, 1. If a man is full of itch,<sup>5</sup> fennel (and) . . . [toge]ther thou shalt bray, mix in oil, [anoint and he shall recover].
- 2. If ditto, \*Ricinus, sumach, thou shalt bray, in . . . wash, the rind of . . .
  - 3. If ditto with oil of fishes' inside (?) 6 thou shalt anoint . . .
- 4. If ditto, "scab of the housewall" (= calcium nitrate?) 7 thou shalt rub, and anoint(?) . . .
- 5. \*Storax, fennel, \*Ricinus, these three drugs for itch . . ., root of barhuš, root of tamarisk, cummin . . . [thou shalt apply].

No. 50. AM. 17, 4 (K. 5906).

- 3. Marrow of a male sheep's "long bone"..., Nigella, pomegranatewater...thou shalt mix together, in honey, curd, cedar-oil... [thou shalt apply].
- 6. 8 If a man's eyes do not see, that man [has walked(?) in] the heat of the day;  $\frac{1}{2}$  shekel of \*storax,  $\frac{1}{4}$  shekel of "salt of Akkad" [in honey(?)] (and curd) . . . [thou shalt bray, apply].
- 8. If the object of vision of a man's eyes is multiplied, fat of a black snake 10 . . . , fat of a lion, 11 asa foetida-gum, opium (v. gum of \*Pinus Halepensis), Salicornia-alkali . . . in equal parts in copper-dust in mountain-honey thou shalt mix, bray, apply . . . to his eyes apply and his . . .

<sup>1</sup> i.e. as ashes.

<sup>&</sup>lt;sup>2</sup> Cf. SM. ii, 657, old soles of sandals for sores in head, and particularly PRSM. 1924, 15, No. 15, 2.

<sup>&</sup>lt;sup>3</sup> Not "hippopotamus" here (MA. 48).

<sup>&</sup>lt;sup>4</sup> Ta-kas, possibly connected with DiD "cup", but uncertain. Ansabtu, a finger-ring (Holma, WB. 5). Cf. AM. 65, 5, 24.

<sup>&</sup>lt;sup>5</sup> Guraštu, PRSM. 1924, 10, n. 1.

<sup>&</sup>lt;sup>6</sup> Cf. the "garum" of Pliny (NH. xxxi, 43) prepared from the intestines of fish, from which "garum" came the refuse called "alex" (ch. 44) used for scab in sheep and ulcerations.

<sup>7</sup> PRSM. 1924, 4.

<sup>&</sup>lt;sup>8</sup> Probably duplicate AM. 18, 4, whence the restorations.

<sup>9</sup> Digil ênâ <sup>II</sup>-su mâdi, cf. Kü. ii, iii, 49, "If a man drinks beer and išdin!-su palķa digla mâdi."

 $<sup>^{10}</sup>$  Cf. AH. 252, l. 14, [šêr]  $\dot{siri}$   $\dot{salmi}=$  the  $\dot{sadanu}$  -plant.

 $<sup>^{11}</sup>$  = opium, AH. 5, l. 69.

No. 51. AM. 17, 6 (K. 11568) + 18, 8 (K. 13500). Col. i.

- 1. . . . dates, 2 shekels of gum of \*galbanum(?) . . . [scab?] of the wall together in oil thou shalt mix (and) bind on.
- 3. . . . their sight (?) . . . For their recovery fir-turpentine . . . , . . . , cantharides (?), these four drugs in equal parts [thou shalt mix, bray, in oil] of cedar anoint, apply to the affected surface, bind on, and he shall recover.

Col. ii.

- 1. . . . (it is) the "Crushing of Ishtar" 2 . . . on the affected surface thou shalt anoint curd, [and he shall recover].
  - 3. For the "Crushing of Ishtar"...
- 4. For the erimu<sup>3</sup>-skin-trouble . . . these three drugs together thou shalt bray . . .

No. 52. AM. 17, 5 (K. 3642).

- 1. To remove soreness 4 anoint thereon with the urine of a white dog, [and he shall recover].
- 2. For ditto, an egg from a nest which has been spilt on the ground [thou shalt anoint (?)] thereon.
- 3. For ditto, thou shalt bray mustard, asa foetida, hellebore, . . . , \*ammi, \*mint, lupins, [\*\*Calendula?], \*corn-marigold, male mandrake-root, licorice-root, . . . , \*Anacyclus, in scented(?) 5 oil without a meal [let him apply?].
- 7. For ditto, thou shalt bray as a foetida-root, in beer without a [meal let him drink?].

<sup>&</sup>lt;sup>1</sup> See No. 49, ii, 4.

<sup>&</sup>lt;sup>2</sup> Cf. AM. 44, 1, ii, 10.

<sup>3</sup> Erimu, a skin disease (Dennefeld, Geburts., 30b r. 17). Cf. the plant "erimu (probably šam erimu "plant for erimu", AH. 58). Cf. Δος "a rough place", i.e. hence roughened or chapped skin. RA. 1913, 77 gives DAR. A = e-ri-mu.

<sup>4</sup> Umsatu. Cf. AM. 18, 3, 1, "If he have umsatu," \*Ricinus, alkali, etc., being applied locally. Here Ana umsati nasahi(hi) "to remove umsatu" (apply the urine of a white dog, or various other remedies; cf. l. 10). Umsatu may occur ina lib Uš-šu (in the middle of his penis, 22, 1, 19). In 40, 5, 5, after anointing, umsate uk-ta-... It is therefore an ailment, probably a skin-trouble. Holma (p. 34) quotes S. 1419, 6, šumma umsatu (DUB, "Aussatz, o. ä.") elanu u-ru-uh (hair) imni šaknat; (p. 96), K. 4020, šumma birku rabi-ma, arik-ma, ina libbi or ina pi birki-šu umsatum; (p. 162, n. 4), SAI. 2597, DUB = umsatu, quoting Meissner, Supp. 10a, K. 4020, "Speziell Geschlechtskrankheit." I doubt this, and prefer to see in it NYDIN "raw flesh", i.e. sore skin (Holma, KB. 5; Meissner, Bab.-Ass. ii, 291, "Geschwür"). The drugs certainly coincide with the expected treatment.

<sup>&</sup>lt;sup>5</sup> BAR.GA, Kü. 110.

8. For ditto, Salicornia-alkali, myrrh, . . . pomegranate-rind, roses, together thou shalt bray [and apply] . . . destroying (?) soreness, Salicornia-alkali . . .

No. 53. AM. 18, 1 (K. 13465).

A mutilated eye-text with similarity to AM. 9, 1, 22 (cf. l. 7, A.GA), and 25. No. 54. AM. 18, 3 (K. 10535).

- 1. [If a man] have soreness, \*Ricinus, Salicornia-alkali, . . . fennel, in oil of \*storax thou shalt bray, in . . . in mountain-oil thou shalt anoint him and [he shall recover].
- 4. [If ditto], myrrh, pine-turpentine, thou shalt bray, in [...-oil thou shalt mix]... for fourteen days thou shalt bind on [and he shall recover].
- 6. [If a man]'s right eye is inflamed (swollen) and  $te[ars\ flow]$  . . . for his recovery . . .
- No. 55. AM. 18, 4 (K. 9555). (Ll. 6 ff. are probably duplicate of AM. 17, 4, 6.) <sup>1</sup>
- No. 56. AM. 18, 6 (K. 8832). (Possibly same tablet as AM. 14, 1, K. 8349.)
  3. . . . thou shalt mix, rub.<sup>2</sup>
- 4. [If a man's eyes are sick <sup>3</sup>], tears flowing, the eyes being full of film . . . \*storax, cantharides(?) . . . [in oil of] cedar thou shalt mix, apply to his eyes and he shall recover.
- 7. [If a man's eyes are sick]... the object of his vision <sup>4</sup> being indistinct (heavy), to remove the white (?) which is on the pupil <sup>5</sup> of his eyes ... [in] oil of cedar thou shalt mix, apply to his eyes and he shall recover.
  - 9-10. Mutilated, but similar.

No. 57. AM. 18, 7 (K. 9869).

5. . . Alkali, savin (?) (or tragacanth (?)), \*\*Conium maculatum . . . , the plant "raven's-foot" 7 . . . , wherein katiki (?) 8 comes forth, thou shalt pound (and) strain . . . 9 either in mulu-tinna beer [or in . . . thou

<sup>&</sup>lt;sup>1</sup> 18, 5, joins 73, 1.

<sup>&</sup>lt;sup>2</sup> Tetenikk[i], PRSM. 1924, 4, n. 6, and see Ebeling, Arch. j. Gesch., xiv, 1923, 35.

<sup>&</sup>lt;sup>3</sup> Cf. 9, 1, 31.

<sup>4</sup> Di-gal, from 1. 9, cf. di-kal, 9, 1, 32, and di-gi il, 17, 4, 8.

<sup>&</sup>lt;sup>5</sup> Cf. PRSM. 1924, 28, n. 10.

<sup>&</sup>lt;sup>6</sup> See JRAS, 1924, 452, n. 7.

<sup>&</sup>lt;sup>7</sup> AH. 255.

<sup>8</sup> Text re-examined. Ka might be Kur dis.

<sup>9 . . .</sup> iš du 'i, meaning doubtful.

shalt knead] . . . for one hundred days he shall drink . . . [(these) prescriptions?] have no equal . . .

#### (L. 11 indicates an eye-text.)

No. 58. AM. 18, 10 (K. 4116).

- 1. . . . urine . . . the middle of his eyes . . .
- 4. When a man's eyes . . . , a drug against pain . . .
- 6. To appease . . .
- 7. Fat, shell, salt, to the middle of his eyes [thou shalt apply] . . .
- 8. Thou shalt bray salt besides (?) \*Ricinus in honey [apply] . . .
- 9. If a man's eyes  $\dots$ <sup>1</sup>

No. 59. AM. 75, 2 (K. 6629). A fragment of medical prognostics.

Ll. 5-8, pa'sat, pa'sa, of eyes, may be either he flow" (i.e. stream with water), or pa'su "bruise", less likely. Pa'zutim is applied to roses (see No. 28, A, l. 24), which, with ground Lolium, are to be made into a rabiku and eaten in oil and honey. Ll. 9-11, either eye or both may set up (nadû) IM.MAL.LI = kalû. Kalû is a difficult word: IM.GUŠKIN ("gold clay, gold earth") = illur panî ("face bloom")² = kalû (SAI. 6352), and on CT. xix, 21, 32, it is followed by IM.DIR (= "red clay," šeršerru "red ochre"). "Face bloom" may be rather the lighter tint of the Arab than the ruddiness of the Northern European (probably represented by kalgukku "red kalû", MA. 383). Kalû must be an earth of a golden-brown colour (paralleled by IM.UD" plaster, gesso", IM.DIR "red ochre"), probably ωχρα "yellow ochre", the reference in this eye-text being to the muddy-yellow appearance of eyes in jaundice.

Ll. 12–16, tarkat, tarka, of eyes, in ll. 15, 16, followed by "and will not open". Tarâku appears from MA. 1193 to mean "to beat" and "to fail" (לַלַּיֻ "abandon", דְּלֵבֶּן "destroy"), probably here with the intransitive sense.

<sup>&</sup>lt;sup>1</sup> AM. 19, 1, and 20, 1, dup. of K. 2574, CT. xxiii, 39 ff.

<sup>&</sup>lt;sup>2</sup> Illuru, long known as equivalent for "flower" (MA. 49; HWB. 76). I. sâmu = "scarlet anemone" (AH. 56), so that i. must be the calix or bowl-like form of the anemone (rose, poppy). King, CT. xxvi, 24, 32 ff., translates the description of the "female colossi of alabaster and ivory" ša illuru našā kitmusa rittašin "wearing horned-headdresses (?) having bent talons", but I think it should be "which bear up the calix, their forelegs bent". The "calix" is the great column-base carved in form of a flower, borne on the backs of colossi (e.g. the picture of the model of a female colossus standing, bearing such a base, G. Smith, Ass. Disc. 174; for such a calix (without a beast), Perrot, Histoire, ii, 223, and Woolley, Carchemish, ii, 155; for a couching beast with bent forelegs bearing a column, Pottier, Ant. Assyr. 144; Ménant, Glyptique, ii, pl. 10, 4). Illuru thus certainly means "calix", especially (with sâmu) of the red anemone; hence pâri Aŝur-li'... illuriš usimu (Sarg. Cyl. 33), paralleled by maŝak A. akus ("the skin of A. I flayed", Khors. 56), must mean that Sargon tricked it out like a flowercalix, or (red) anemone, probably dyeing it red like the skin of Ilubidi (Cyl. 25). Illur panî would thus parallel our poetical "bloom", "roses", "damask", of cheeks.

No. 60. AM. 94, 8 (K. 7279), similar.

For hupti ênâ<sup>II</sup> see No. 28, A, l. 36. Ṣadira, probably ; "be afflicted with nausea", in Etpa. "be disturbed".

No. 61. AM. 105, 2 (K. 3957), similar.

Ll. 8, 10, iṣṣanunda, of the eyes, from ṣâdu, lit. "hunt". Iṣṣanunda is used of demons who press on the land like a storm (abubu) (Devils, i, 63, 11); of eyes, 13, 4, 1 (NIGIN-du); 22, 2, 1 (NIGIN.MEŠ-du), cf. 35, 7, 2; 85, 1, vi, 5 (iṣ-ṣa-nun-du); 14, 5, 9 (i-ṣa-nun-du, perhaps not eyes); uncertain, 14, 5, 12 (i-ṣa-nu-du); 97, 4, 6 (iṣ-sa-nun-du). In a prayer to the Sun-god (97, 1, 19) the suppliant says šak.ki<sup>pl</sup>-mu i-hi-is-su-u igi pl-mu NIGIN-d[u], so that it is probably "oppress" in the sense of "ache", rather than "hunt" = "roam" = "roll".

No. 62. AM. 92, 8 (K. 2508).

- 1. . . . into his eyes thou shalt blow . . . ditto.
- 3. . . . thereon shell, fine oil . . . thou shalt burn, the smoke of the . . . (?) . . . ¹ to his eyes thou shalt apply, and he shall recover.

IM.TIG.EN (?).NA. IM.TIG occurs in AM. alone (3), 31, 7, ii, 10; 51, 1, 12, glossed IM.TIG.EN.NA; 78, 7, 7; in IM.TIG.EN.NA (13); 7, 3, 2; 45, 6, 11 (IM.TIG.EN); 48, 1, 3, 6; 48, 3, 3; 51, 1, 12; 54, 1 r. 11; 58, 2, 3; 75, 1, 33; 78, 5, 9; 78, 7, 3, 6; 79, 1, 14; in IM.TIG.GAR.RIN.NA (6) 5, 5, 11; 23, 8, 4; 40, 5, 11; 43, 2, 7, 9; 44, 1, ii, 6. (Uncertain are 7, 4, ii, 4; 16, 1, 8; 29, 5, 4; 51, 1, 6; 53, 1, iii, 5; 82, 1 r. 4.)
IM.TIG = kadutu = didu (i.e. tittu "mud"); IM.TIG.EN.NA = kadut (and kadû) šikani or šiknu sa nâri "bed of the river". For these see Del., HWB. 581, and for a short discussion

šiknu sa nāri "bed of the river". For these see Del., HWB. 581, and for a short discussion on the medicinal use of this "bed of the river" see Kü. 102. It also = ha-a-pu (Smith, CT. xxxvi, iii, 11; AH. 257). IM.TIG.TIN.NA = kadutum šikari = šuršummu ša EI.ŠAG ("lees, yeast of kurunnu-beer"); IM.TIG.A.AB.BA = kadut tāmti ("of the sea"). IM.TIG.ID.DA = kadut nāri ("of the river"). See HWB., ib., and Br. 8406, 8407. There is little doubt that the accepted translation of Küchler is on the right track, but it is difficult to settle the exact medical use.

In medicine IM. TIG. EN. NA is usually drunk for stomachic troubles (45, 6, 11; particularly 48, 1, 6, brayed and drunk alone in beer); chest (51, 1, 12), anus trouble (58, 2, 3). But it is also used externally,  $\frac{1}{2}$  ka in poultice for stomach and back (Kü. ii, 1, 4), a very small amount. I had thought of sulphate of magnesia (Epsom salts) as a possibility, but the curious external use is a little against this, and also we should have expected it to have been defined by the word "salt". At the same time hydrated magnesium sulphate is found "in solution in seawater and in mineral waters; also as efflorescent crusts and masses, as in the limestone caves of Kentucky and encrusting serpentine and other rocks rich in magnesium" (Rutley, Elements of Mineralogy, 166). The Admiralty Staff, Geology of Mesop., 14-15, gives the bulk of the dissolved salts in the sediment of flood water as bicarbonates of lime and magnesia and some potash. The Assyrian doctors may have used this sediment internally on this account. There is some similarity to Pliny's "flower of salt" (NH. xxxi, 42), found in Egypt, brought down by the waters of the Nile, which is sophisticated and coloured with red earth, the sediment being even shaken to renovate its saffron colour. When drunk with wine and water it has a purgative effect, and it is used in detersive compositions, and for removing hairs from the eyelids. IM. TIG. GAR. RIN. NA is used externally (apply, bind on, for itch, etc.). GAR. RIN. NA is unknown, and hence it is difficult to identify the drug.

- 6. [If a man]'s [eyes] . . . and is heavy, for 1 his recovery as a foetidagum . . . eighteen months (?) . . . (?) 2
- 8. . . . five grains of shell of \*storax(-fruit) in oil thou shalt bray, apply.
  - 9. . . . thou shalt apply dry.3

#### C. VARIOUS DISEASES OF THE HEAD, &c.

- No. 63. AM. 21, 2 (K. 6196), which follows AM. 1, 1. Cf. 22, 2 (K. 3550); 43, 5, 7 (K. 9441); 54, 3 (K. 8716); 56, 1 (K. 8248); CT. xxiii, 46, 26; VAT. 8968, 1 (E. xiii, 4).
- 1. If a man' [s head hurts him], his tongue pricks him, his eyes [trouble 4 him], his [ears] sing, his throat chokes him, 5 his neck-muscles hurt him, [his] breast, [his shoulders and his loins] 6 hurt him, his groin 7 . . . his
  - <sup>1</sup> Re-examined: ana should be inserted in my copy.
  - <sup>2</sup> ZI HA TI: hardly innasiha(ha) ibalut "it shall be removed, he shall recover".
- 3 Here should be added a note on AM. 76, 6 (K. 3719), obviously connected with AM. 4, 1 (K. 2416), PRSM. 1924, 12. L. 9, "[Incantation] to turn grey hair black." L. 10, "thou shalt take the head of a male issur hurri, boil, . . . apply, and the grey hair shall turn black." (Cf. PRSM. ib., 16.) I prefer the old idea of Houghton (PSBA. viii, 107) for issur hurri "bird of the ravines" (better "cave-bird", which Langdon, I see, maintains in his Babylonian Wisdom, 59) to Delitzsch (Ass. Studien, 113) "hawk". The latter depends on "

  "hawk", and the Assyrian synonym for issur hurri, buşu (as it has been read) "hawk".

But I think hurri is more probably here the ordinary word "cave", אור. Moreover, I doubt the reading bu-ṣu without a long vowel in either syllable; it is far more probably sir-ṣu, and we may identify sirṣu with שֵׁבֶּיל comparing Lev. xi, 19, 20: בּלֹי בּל בּל : בַּל בּער בִּעוֹף . . . All fowls that creep, going upon all four", a description of the bat, to which anyone who has seen a bat shuffling along the floor of an Eastern khan will testify. Cf. birkâ ša uktassâ sir-ṣi-[iš], the comparison being to knees bound "like a sirṣu" (VR. 47, b 25, where sir-ṣi = iṣ-ṣur hur-ri). The simile must be from the bat where the legs are included in and joined by the wing-membrane.

Some evidence may be drawn from the fact that the equation  $sirsu = issur\ hurri\ (CT.\ xiv, 4, 1, 7)$  is immediately followed (l. 8) by du-u-du = ip-pil-tum, although I admit that just a position in syllabaries carries little weight. But dudu must be ישניסל "bat", and ippiltum (which I prefer to Delitzsch, ib. 114, ib-ne-tum, will then be the uncouth אַנְעָלֶּבֶּי, by some metathesis due to l in the word.

For comparative purposes I add K. 5418, i, 5 (quoted Del., HWB. 292), sabê pagri işşur hurri "men with bodies of işşur hurri", where "bats" is at least as probable as "hawks", and D.T. 59, 11 (ib.), "like an işşur hurri ina narbaşiki (in thy dwelling)." SM. ii, 690, prescribes the head of a bat boiled in oil, for making hair grow; on the other hand, p. 702 recommends a hawk's blood. (For bats in caves see Layard, Nineveh and Babylon, 307.)

<sup>4 [</sup>*Iṣṣanundu*], see No. 61, ll. 8-10.

<sup>&</sup>lt;sup>5</sup> AM. 22, 2, 2, is-hat-su, the usual word for pressing grapes. See p. 45, n. 1.

<sup>6</sup> Naklabu, Holma 57, Weiche (?).

<sup>&</sup>lt;sup>7</sup> Sapulu.

hands hold poison, his fingers . . . cramp <sup>1</sup> him, his stomach is inflamed,<sup>2</sup> his bowels are hot,<sup>3</sup> his knees . . . him, his flesh holds poison . . . [instead of ?] speaking . . . (?) <sup>4</sup> . . . with his stomach he speaks . . . , is delirious <sup>5</sup> . . . (remainder broken).

No. 64. AM. 22, 2 (K. 3550), cf. AM. 21, 1 (K. 6196). Obverse.

- 1. [If a man's head hurts him], his mouth pricks him, his eyes trouble him, [his ears sing], his throat chokes him, his neck-muscles hurt him, . . . his fundament, his breast, his shoulders and his loins hurt him, [his fingers] are cramped, his stomach is inflamed, his bowels are hot, . . . his hands, his feet and his knees ache, 6 he has . . . , either his bowels are affected, or his kidneys are upsetting him, . . . or he is sick of retention, either restriction of constipation or restriction of breath . . . , or is sick of nephritis (?) 7 or is sick of bile, or is sick of jaundice, . . . [or] is sick from a curse, or is sick of ulcers (?), or of rheumatism, or of the hand of a ghost, . . . or is sick of the demon "Raiser of the Head for Evil". . . . To assuage his obsession 8 . . . poppy, "stone" of poppy (opium), Artemisia, \*\*balsam, \*sagapenum, . . . licorice, root of licorice, male Mandragora . . . [kan]kadu, lidrušu, Salicornia-alkali, . . . fennel, fennel-root, sasumtu, \*Arnoglosson . . . Solanum . . . Reverse.
- 3. . . . gum of \*galbanum, turmeric . . . , . . . (?) into his nostrils [thou shalt blow, and he shall recover].
- 6. . . . pine-turpentine, hellebore, a plant for pain(?) . . . together thou shalt pound, with  $u\check{s}sa$ -beer and . . . thou shalt mix, . . . , [in] rosewater he shall wash, with oil of fir-turpentine thou shalt anoint, [and he shall recover].

<sup>&</sup>lt;sup>1</sup> [I-kal]-la-šu, cf. 22, 2, 4.

<sup>&</sup>lt;sup>2</sup> Innapahu.

<sup>3</sup> Ir-ru-šu ia-ru-ru, cf. 43, 5, 8, irrušu iarrur.

<sup>4</sup> Mukku.

<sup>&</sup>lt;sup>5</sup> Tên-šu iltana- . . . (from šanû).

<sup>6</sup> Ikassašu.

<sup>&</sup>lt;sup>7</sup> SA. HI.BIR, probably connected with SA. HI.RA.RA = rapadu, a disease (Br. 3143) (cf. AH. 83, 258). As BIR = "kidney" we may probably see some kidney trouble here.

<sup>\*\*</sup> Ana maš-tak-ti-su bulluti. Maštaktu is said of eight colossi, each of 4610 talents, mal-tak-ti erî nam-ri "(with) overlay (?) of bright copper "(Sargon, Khors. 162), (? Thu, Pu. "be overlaid with rust"). The lion-heads found by Dr. Hall at El-Ubaid will bear this out. The word occurs also with silver in the difficult proverb (Jäger, BA. ii, 286 ff.) simme la asa bubuta la akala maštaktum kaspi u maṣarru huraṣi silimta ana nadani bubuta ana paṣari ikkalā. The Sumerian equivalent here is Giš.Ki.lal, and Ki.lal = sanaku ṣa ṣarpi, i.e. "pressing of silver" (overlay or inlay?). KAR. 70, 5, gives INIM.INIM.Ma maṣ-tak-ti [lib] ZI.GA (for the restoration see rev. 22). A root PRU is found, used of ears (suttuka), and finger-nail (suttukat) (Dennefeld, Geburts., vocab., "beschädigt").

- 9. . . . \*ammi, pine(?), Salicornia-alkali, hellebore, fir-turpentine, pine-turpentine, thou shalt mix [together], apply(?),¹ and he shall recover.
- 11. . . . fir-turpentine, pine-turpentine, mustard, seed of *kutru* . . . these drugs thou shalt pound (and) strain; parched *Lolium* . . . in a pan thou shalt mix, spread on vellum, anoint him (sic) and he shall recover.
- 14. . . . alum(?), asa foetida, \*storax, pine-turpentine, fir-turpentine, . . . together thou shalt pound, strain, in kidney-suet of a male sheep, wax(?) . . . at his anus apply: an enema <sup>2</sup> besides . . . hellebore, \*ammi, \*mint, asa foetida, . . . suadu, seed of . . . (remainder mutilated).
- 22. (Dup. of AM. 41, 1, iii, 22?) . . . fir-turpentine, pine-turpentine, roses, Lolium, . . . mustard, \*mint, \*ammi, saffron, . . . fourteen drugs in beer (and) vetch 3 water . . . [at his anus] thou shalt pour.

#### D. DISEASES OF THE MOUTH.

The series  $\check{S}umma$  amelu  $\check{s}inn\hat{e}^{pl}$ - $\check{s}u$   $imara\check{s}u^{pl}$  (" If a man's teeth ache") is a short series, apparently only of two tablets, probably preceding in order the series  $\check{S}umma$  amelu  $p\hat{u}$ - $\check{s}u$  ikabbit.

- <sup>1</sup> Te(?)-pu(sir)-...(?)-ma.
- <sup>2</sup> NAGAR (Br. 11163) must be allanu, as Ebeling, Arch. xiv, 35, saw, recognizing the meaning ("zäpfchen"). Cf. AM. 43, 1, 6, "these six drugs nagar-nu šamru are a powerful nagar-nu," while ll. 4, 10, 18, speak of making an al-la-na(an) (for his anus). 74, 1, 33, speaks of kneading roses, fenugreek, and Lolium in rose-water, binding it on, mixing in oil, making a NAGAR, putting it to his anus; 57, 1, 6, of mixing certain drugs in oil, making a NAGAR-nu; 25, 5, 5, of mixing drugs in oil, NAGAR-an ša . . . Kü. iii, i, 49 . . . išteniš HAR.HAR ina lipî tuballal NAGAR-nu teppuš(uš) šamni tasalah ana Ku-šu tašakam, i.e. grind together . . . , mix in fat, make an allanu, sprinkle with oil, put to his anus. On the other hand, 53, 9, 7, speaks of the patient having . . . and (it) pouring blood, . . . \*ammi, Lolium, alkali . . . thou shalt make an [alla]na, put to his anus; 47, 1, 2, for trouble in which sleep is concerned, for his recovery bray mandrake and \*chamomile, mix in oil, make an al-la-na . . . ib. 4, for something similar, "that man ku.gig (anus trouble) . . . , ki.kal of dates, ki . . . , make an al-la-na ..."; 53, 11, 7, "... KI.KAL of dates pound, [make] an al-la-na"; 58, 9 r. 3 ... al-la-nu KU.GIG (cf. ll. 6, 8); 43, 1, 18 . . . "dates of Dilmun thou shalt mix, an al-la-na . . . "; 5, 7, 6, . . . HI al-la-na KAK-uš; 101, 3, iv, 7, [al]-la-na KAK-uš NI ierini šud ana Ku-šu tašakan(an)-ma ina-eš; 50, 6, 6, . . . tabašal (šal) tušesá(a) al-la-na . . .; 57, 5 r. 6 ff., \*ammi, \*mint, asa foetida, roses, Lolium, opium, salt, Salicornia-alkali, suet of the kidney of a male sheep, these ten drugs al-la-an te[ppuš]; 43, 1, 7, "\*ammi, hellebore, Lolium, (?), \*storax, asa foetida, alum, fir-turpentine, [pine]-turpentine, myrrh, gum of andropogon (?), salt, these twelve drugs separately thou shalt pound . . . boil in fat, wax (and) [gum] of \*galbanum, mix, an al-la-an teppus(us), [at his anus] apply, and he shall recover." Cf. also 43, 1, ii, 6; 81, 9, 6; 96, 2, 2. Medically it is obviously an "injection", "clyster", "suppository"; philologically it may be from elêlu "be pure", with -anu attached, lit. a purgative, parallel to κλύσμα or "drench". Note the similarity of SM. ii, 507, and also the suppository KAR. 201, obv. 45, . . . lu ina lipî tuballal ubani teppuš(uš) ana K[v-šu tašakan] (cf. also rev. 17, 18) ". . . or in fat thou shalt mix, a 'finger' thou shalt make, put to his anus", such as would nowadays be made of soap for a baby; cf. JRAS. 1924, 456, allan šerri "an allanu (enema) for a baby ".
- 3 A.ŠA.HAR.RA: ŠE.GU.ŠA.HAR.RA, obviously one of the vetches (AH. 278, Viciæ spec. impr. Ervilia); "water of vetches," like "water of lentils", AH. 114.

Tablet I.

No. 65. AM. 23, 6 (S. 234); AM. 24, 2, and 25, 2 (K. 10330 + 79–7–8, 34), probably part of 68, 5 (K. 11753); AM. 25, 9 (K. 16401); AM. 28, 1 (K. 2439 + 2849) + 30, 8 (K. 2479) + 25, 1 (K. 7635) + 30, 10 (K. 13407).

Col. i.

- 1. (AM. 28, 1.) If a man's teeth hurt, thou shalt take a mušdimgurinna <sup>1</sup>..., the white of its inside thou shalt enclose in wool, with oil [sprinkle(?), put it on his tooth]; male mandrake-root, \*ammi-root, ... \*storax, gum of \*galbanum, vinegar, ... flour <sup>2</sup> against his mouth (tooth) [thou shalt bind and he shall recover].
- 6. Powdered alum, . . . \*galbanum, dates . . . , juice (tops) of Crataegus azarolus (?) . . .
  - 9. *Hi*-...-plant, ... powdered alum(?) ... (After a gap of about 10 ll., AM. 30, 8.)
- (AM. 30, 8.) 4. If ditto, for one day thou shalt rub... If ditto, flour of dust of millet... he shall pour  $^3$ ...
- 7. (Dup. of AM. 30, 13, 6.) If a man's tooth hurts him . . . If ditto, a green (yellow) frog . . . If ditto a green (yellow) frog . . .
  - (AM. 25, 9, K. 16401, is probably the left-hand lower corner.)
- (25, 9.) 2. If a man's mouth . . . thou shalt roll, sprinkle with oil . . .
  - 4. If ditto . . .
  - 5. If ditto . . .
  - 6. If ditto . . .
  - 7. . . .
  - 8. If ditto . . .
  - 9. If ditto . . .

(Col. ii is unidentified: it might possibly be AM. 27, 9, K. 13385, an incantation for "When blood comes into a man's mouth". Except for this text of Col. iii the beginning is lost until we reach 25, 1, iii, 1 ff.: l. 10 "Incantation for Toothache". An incantation begins with ll. 11, 12, and after a gap of about 3 ll., 28, 1, iii, joins. After two ll. of ritual comes an incantation, 28, 1, iii, 4-7+30, 10, 1-4, and 24, 2, 1-6, and then another ritual and incantation which can be nearly completed from 24, 2, 7-15, and 28, 1, iii, 7-13+30, 10, 5-10 as follows:—)

<sup>&</sup>lt;sup>1</sup> See No. 34, l. 4.

<sup>&</sup>lt;sup>2</sup> Upuntu.

<sup>3</sup> DUB - rak = isarrak, as in Zimmern, Rit., p. 223. I-sar-rak, 24, 5, 15; ta-sar-rak, 54, 1, 8, 11, of pouring or spreading either "flour of \*\*gum (kirkiranu) (of pine)" or pounded \*ammi on ( $= ana \ pani$ ) a thorn fire to fumigate his anus. Is it פון "spread"?

Incantation for Toothache . . . the charm [three] times over it thou shalt recite . . .

4. Charm.¹ O Shamash, because of my tooth which hurteth me [some ghost(?) (un)bu]ried(?), to whom I have not offered food nor poured forth water, is angry; like a sealed tablet(?)² to thee I pray that I may shut him in and cover him(?) over, like a moth whose tooth hurteth him not, so shall tooth, too, not hurt me.

(Then follow several mutilated prescriptions and incantations: 28, 1, iii, 14 ff.; 24, 2, 16 ff.; "Incantation for Toothache... in the morning [thou shalt recite] the charm three times...

Charm. After Anu [made(?)... (and)... made Eridu?], Eridu made GI... like the star(s) a number [had not?]..., harm(?)...

Incantation for Toothache . . . [thou shalt tie a patinnu 3-bandage], as [thou tiest] the bandage [the charm thou shalt recite], put it on his tooth and . . .

Charm. Anu . . . , after Anu made . . ."

The text then breaks off, but 25, 2, 1-4, may supply the completion (Col. iv) with "[The charm is] not ya-tu, it is the charm of (such and such a god)". 25, 2, 5-13 supplies the ends of lines of the next portion, and then comes the Legend of the Worm, CT. xvii, 50; AM. 23, 6, 1 ff.; 25, 1, iv, 1 ff., and 2, 15 ff.):—

Incantation for Toothache.

Charm.<sup>4</sup> After Anu made the heavens, the heavens made the earth, the earth made the rivers, the rivers made the canals, the canals made the marsh, the marsh made the Worm. The Worm came weeping unto Samas, (came) unto Ea, her tears flowing: "What wilt thou give me for my food, what wilt thou give me to destroy?" "I will give thee dried figs (and) apricots." "Forsooth, what are these dried figs to me, or apricots? Set me amid the teeth, and let me dwell in the gums, that I may destroy the blood of the teeth,

¹ This must be thus restored: Šiptu. ¾ Šamaš aš-šum šinni-ia ša ik-kal-an-ni . . . -bi-ru ( √ ¬¬¬ ?) ša ki-is-pa la ak-si-pu-šu u me-e la ak-ku-šu [. . .] it-taš-bi-is ka-ni-i[g (?)-g]iš (?) ka-a-ša am-hur-ka ak-ta-la-šu u ak-ta-at (?)-ma (?)-šu (?) kima a-ša-ši šinni-šu la ikkal-šu a-a-ši šinnu la ik-kal-an-ni.

<sup>&</sup>lt;sup>2</sup> Or "a sealer (of tablets)".

³ Patinnu = parsigu, particularly "head-bandage" (MA. 835). Cf. in 45, 5, 5, XIV KU pa-tin-ni tu-kap-pat "thou shalt tie together (PD) fourteen bandages" for stomachtrouble, i.e. to swathe the man's stomach. Kapátu, PRSM. 1924, 23, n. 7.

<sup>&</sup>lt;sup>4</sup> This text has been previously translated in my Devils, ii, 160; Semitic Magic, xliii; Meissner, MVAG. 1904, 74. AM. 25, 2, 15, allows us to restore l. 1 ul-tu iluA-nu ib-nu-u šame(e).

and of the gums chew their marrow. So shall I hold the latch of the door." "Since thou hast said this, O Worm, may Ea smite thee with his mighty fist!"

Incantation for Toothache.

Ritual for this: thou shalt mix usa (-beer), (of?) millet-meal <sup>2</sup> and oil together, repeat the incantation over it three times, put it against his tooth (mouth).

Charm.<sup>3</sup> Be long,<sup>4</sup> (yet) we shall (surely) catch thee! The door is the flesh, the latch is the bone; she hath entered [the flesh], she hath lifted the bone, she hath bitten the flesh, she hath dug into the bone; she hath brought decay <sup>5</sup> into the teeth, she hath [brought] fire unto the latch (?)! Whom shall I send unto Marduk, the eldest son [of the Deep], that he may bring a drug for the charm for recovery until . . .?

The charm is not . . . (?); it is the charm of Ea and Marduk, the charm of Damu [and ?] Nin-ka[r-rak]. O Gula, [quicken] the recovery! . . . Recite the Charm.

Incantation for Toothache. The ritual not written.

(Catch-line.) If a man's teeth are all loose.<sup>6</sup> First Tablet of the Series "If a man's teeth ache".

Tablet II.

No. 66. The Second Tablet of the Series is (apparently) made up of the following: (1) AM. 36, 2 (K. 2419) + 21, 1 (K. 2461) + 31, 6 (K. 3303) + 23, 7 (K. 8169) + 28, 4 (K. 10733) + 27, 5 (K. 11630) +

- ¹ Here the Kouyunjik versions end. Read uk for my az, AM. 25, 1, 7; luksus  $kusase^sus$ , Meissner "will ich ausbrechen seine Zähne"; Holma, 24, "Zahnwurzel?"; but luksus must be from DDD "chew", and kusase a form of lands lus, cartilago, pars lus lu
- <sup>2</sup> AH. 203. Cf. Hrozný, Getr. 150, Kaš.u.sa.ziz.an "Emmermischbier". Or is kil. "bloom" here?
- $^3$  The composite text runs (28, 1, iv, 2 ff.; 25, 1, iv, 10 ff.; 23, 6, 8; cf. also 36, 2, iii, 1–3):—

Šiptu. A-ri-ki ni-ba-(a)-ri-ki iṣudaltu šeru iṣusikkuru gir. PAD. DU [šeri]e-ru-ba gir. PAD. DU iš-ši iš-šu-uk šeri iḥ-r[i] gir. PAD. DU a-na šinnepi it-ta-di i[k]-ki-ta (sic, re-examined) a-na sikkuri (?) [it-ta (?)]-di išati. Man-nu lu-uš-pur a-na itu Marduk mār riš-ti-i [ša apsī lu-(so also S. 234, not ki)]-še-bi-lam-ma šammi šip-ti (v. šipti) til. la. Na a-di . . . tu ul ya-at-tu šipat itu Ea u itu Marduk ši-pat itu Da. Mu [u?] itunin. ka[r. ra. ak] itu Gu-la til. la-ma [ša-ba-ki bulluţi(i)] tu.en. (itunin. ka[r. ra. ak] appears certain.)

- <sup>4</sup> A threat in the imperative, not unlike the Hebrew, e.g. Is. viii, 9. It is better thus than to take ari from aru "I shall reach thee".
- <sup>5</sup> Ikkitu, cf. PRSM. 1924, 2, n. 5, where it means "scabies"; compare also rišutu in the same connexion, and again as caries in n. 2 of No. 66.
  - 6 I-na-aš-[šu] from nâšu "quake".

45, 7 (K. 13900) + 28, 3 (K. 13971) + 66, 10 (K. 16408) + 27, 1 (K. 16411) + 39, 2 (K. 16418) + 26, 9 (Rm. 944); (2) AM. 26, 2 (K. 3267) + 25, 6 (K. 8089) + 23, 10 (K. 8956) + 23, 1 (K. 9072) + 26, 8 (K. 9438¹); (3) AM. 90, 2 (K. 2290); (4) AM. 26, 6 (K. 6166). Although these four component pieces have no actual contact, there is very little doubt that they once formed part of the same tablet.

Col. i.

 $(AM.\ 21,\ 1.)$  1. [If a man's teeth] are [all] loose and decay<sup>2</sup> [sets in] . . . [thou shalt rub] . . . on his teeth until <sup>3</sup> blood comes forth, [and he shall recover].

3. [If a man]'s teeth are loose and . . . , . . . (and) \*ammi thou shalt bray together, r[ub on, . . . and he shall recover].

(Then follow the beginnings of fourteen lines, and then begins AM. 31, 6):—20. . . . myrrh, . . . , \*opopanax, these eight drugs . . .

23. Savin (?) (or tragacanth?), pine-turpentine, . . . , asa foetida . . .

#### (Here are joined AM. 28, 4 + 26, 9.)

25. If a man's teeth have become 4 yellow, his mouth . . . him, . . . , thou shalt bray together "salt of Akkad", \*ammi, Lolium, pine-turpentine; (with these) with thy finger [thou shalt rub his teeth] . . . , cleanse his mouth and nostrils . . . , wash his mouth with honey, oil (and) kurunnubeer . . . with a feather thou shalt make him vomit, 5 and (then) thou shalt

- <sup>1</sup> This last join due to Ebeling. Keilschr. 42.
- \* Rišutum, itch in head, PRSM. 1924, 2, n. 5. The extension of meaning is seen in caries.
  - <sup>3</sup> Read adi, not kab. Re-examined.
  - 4 RU.A, lit. "fall".

<sup>5</sup> Ina ID (= kappi) tušaprašu. The credit of this translation belongs to Ebeling (Arch. xiii, 11, n. 3, K. 2414, K. 3516, my AM. 80, 1, 15) "mit einem Flügel (?) sollst du ihn zum Erbrechen bringen", quoting ID = kappu (SAI. 4692). MA. 420, subat kappi "garment of feathers" is comparable. He does not, however, give any further explanation of tušaprašu.

His ingenious explanation is now confirmed by AM. 21, 6, 5 . . . ga-pi (i.e. gappi) tušaprašu, and AM. 36, 2, 7, ina id. Hu tu-ša-'-ra-šu. The latter word appears to be a variant for tušaprašu (AM. 80, 7, 6 and 9 and 11); it was first noted by Kü. (iii, i, 16, bi.a.sud *išatti* tuša'-rašu; cf. ii, 25). He connected it with "שרה" "entleeren" (as meaning "erbrechen und cacare?" p. 139), including iarru. Küchler's meaning for this seems undoubtedly correct; it implies evacuation or getting rid of the trouble by ejection in some form, but I think it is rather from "רדה" "throw", "shoot". The following examples show the use of ina id tušaprašu: AM. 45, 1, 5; 48, 2, 24; 49, 5, 4; 53, 10, 3; 55, 7, 3; 80, 1, 15; 87, 8, 4.

Iarru is added after the patient drinks nettle-seed in hot rose-water for a cough (80, 1, 11, cf. SM. ii, 670, 204), \*storax in beer (36, 2, 8), castor oil in beer (36, 2, 10), the first instance indicating the breaking up or expulsion of phlegm, the last the natural result of castor oil. In Kt. iii, i, 52, iarru is added after "... fennel, \*storax, \*manna, \*Ricinus", which would produce the same result. In iii, ii, 23, Küchler rightly considers that vomiting is indicated: Šumma amelu ina patan riš libbi-šu ikasṣassu (see No. 64, n. 6) išata libbi irtaši ina giši-šu marta iarrum (während er rülpst, Galle entleert).

bray lupins (and) turmeric together, [let him drink (them)] in oil and kurunnu-beer, [and he shall recover].

- 29. Crushed (?) 1 potsherds thou shalt reduce, bray: cleanse his mouth and nostrils; let him draw up 2 oil by a reed-tube into his nostrils, the potsherds (?) 3 with wool . . . thou shalt pound fine, put into his nostrils. 4
- 31. If ditto, thou shalt bray the plant kak.sik(?), in cil [thou shalt mix] . . . fill(?), and he shall recover.
- 32. If ditto, thou shalt boil gum of the \*Aleppo pine with honey . . . <sup>6</sup> of his mouth it shall remove.
- 33. (Here is joined AM. 66, 10.) [If] . . . , [fat] of male sheep thereon (?) . . . , he shall scrape <sup>7</sup> his [teeth], . . . thou shalt cleanse, <sup>8</sup> the black of his teeth it shall remove.
  - 35. . . . together thou shalt bray, apply to his mouth (tooth).
  - 36. . . . thou shalt put and he shall recover.

Here almost certainly follows, after a short interval, AM. 23, 10 + 26, 8 (etc.):

- 1. If a man . . .
- 2. If a man . . .
- 3. Seed of . . . he shall pour (?) . . .
- 4. Seed of oak (= galls) . . .; then refined oil . . .
- 5. Roses . . . thou shalt put; then refined oil . . .
- 6. If a man's tongue ip-..., [juice (tops)] of tamarisk, juice (tops) of lemon, juice (tops) of Solanum, juice (tops) of ... thou shalt dry, pound (and) strain, on his tongue anoint curd, (then) put it on his tongue and he shall recover.

 $<sup>^{1}</sup>$  Re-examined. Adipti appears certain (adâbu, HWB. 20).

<sup>&</sup>lt;sup>2</sup> GID-da, i.e. išadada; cf. 55, 3, 8, and 64, 1, 10, GID-ad.

<sup>&</sup>lt;sup>3</sup> Ha - an - sa - [ab?]-ti(?); cf. hansabu "potter"; but restoration doubtful.

<sup>4</sup> Read . . . ti itti idķi tudaķķak ana nahiri-šu tašakan.

<sup>&</sup>lt;sup>5</sup> Re-examined, and apparently thus.

<sup>&</sup>lt;sup>6</sup> [Ki]-bit "heaviness, pain"?

<sup>7</sup> Ugarad, ?:

<sup>8</sup> Re-examined. Probably ta-kap-par.

- 8. If a man's lips [are cracked?]..., thou shalt bray \*Ferula communis(?) in anointing 1 oil, (and) anoint his lips, applying 2 (it) thereon on tow, 3 and he shall recover.
- 9. If ditto, arsenic 4 (and) myrrh in oil thou shalt bray, anoint [and he shall recover]. If ditto, and the blood has formed a scab (?), 5 to remove the scab (?) thou shalt repeat it (i.e. the above treatment), anoint the affected surface with curd, \*storax [thou shalt apply, and he shall recover].
- 11. If ditto, thou shalt mix myrrh in wax, anoint his lips, [and he shall recover]. If ditto, his lip being broken,<sup>6</sup> thou shalt fill it with unmelted wax <sup>7</sup> and he shall recover.
- 13. If it is broken (?), thou shalt bray pomegranate, (and) kamkaduplant, ditto; (or) a Scolopendra 8 in curd [thou shalt bray, ditto].
- 14. (Here are joined AM. 25, 6+26, 2.) . . . its head 9 . . . \*storax thou shalt apply, the affected surface thou shalt [anoint?] . . . three times thou shalt do this and he shall recover.
- 17. . . . powdered alum, myrrh . . . [into his nostrils by a reed]-tube thou shalt blow, he shall recover.
  - 19. [Incantation for] the Mouth.<sup>10</sup> As before.
- 20. . . . \*ammi(?) alum, roses, gum of Andropogon(?) . . . thou shalt introduce <sup>11</sup>; into his nose a kattilu <sup>12</sup> thou shalt put; Salicornia-alkali . . . , \*ammi, thou shalt mix, inside his nose thou shalt rub. <sup>13</sup>

<sup>&</sup>lt;sup>1</sup> See No. 33, 4.

<sup>&</sup>lt;sup>2</sup> Tutappa, 24 in Pael. Cf. p. 47, n. 1, and PRSM. 1924, 27, n. 1.

<sup>3</sup> GI.ŠA.GI = puklu and handů, the latter being šim-šim ša libbi kanêpl (Br. 2516), either "pith" or the fluff from the heads of bulrushes used by potters for stiffening their clay (JRAS. 1923, 239). Puklu אָלָבָּב (given as the seed-capsule of flax) will probably be "tow", the coarser fibres of the flax-stalks.

<sup>&</sup>lt;sup>4</sup> For arsenic on cracked lips, cf. SM. ii, 668. See No. 36, iv, l. 12.

<sup>&</sup>lt;sup>5</sup> Iṣanaḥa, ṣinnaḥti. Br. 10584, KU.BAR.RA = subat cluti ("upper garment"), and SAI. 8040 = ṣanaḥu; presumably the outer crust formed by the dried blood. Ana sinnaḥti nisī (RI) tutar-šum, cf. AM. 37, 2, 7, with 35, 1, 8.

<sup>&</sup>lt;sup>6</sup> Hipat, here like hibi referring to a broken place in a tablet.

<sup>&</sup>lt;sup>7</sup> La balla.

<sup>\*</sup> Adudailu, Delitzsch (Stud. 1874, 1, 76) 'L', "millepede". On a Scolopendra (exceeding three inches) at Mourad Pasha, v. Chesney, Exp. i, 726.

<sup>&</sup>lt;sup>9</sup> Sic probably.

<sup>10</sup> Cf. 23, 7, 8.

<sup>11</sup> Tu-lam, cf. VR. 45, ii, 24, tu-la-a-ma. Used with alum (16, 5, ii, 7), presumably šu.sr a-bar ("a finger of antimony") (101, 3, iii, 14), wax (75, 1, 21). The Syr. کُمْ appropinquavit, may offer a solution. Tulammam, 25, 6, ii, 6, see p. 66, n. 4.

<sup>12</sup> Read thus.

<sup>13</sup> Taktanar, √ □ , see PRSM. 1924, 18, n. 2.

## Thompson: Assyrian Medical Texts

- 23. [If a man]'s nose . . . has been stricken, and it collects . . . (?) <sup>2</sup> [for] his [recovery?] thou shalt mix \*mint in cedar-oil and inject it into his nostrils.
- 25. [If ditto, alu]m(?), myrrh, \*storax, thou shalt bray together, apply thereon and he shall recover.
  - 26. . . . thou shalt bray, bind thereon, and he shall recover.
- 27. . . . a pearl which a priest <sup>3</sup> . . . [into] his nostrils thou shalt blow, . . . these two drugs.
- Col. ii. (Here is AM. 27, 5, rev.)
  - 4. . . . and he shall recover:
  - 5. . . . cinnabar thou shalt bray, bind . . .
- 7. (Here are joined AM. 27, 1+28, 3.) [If a man's mouth(?)] . . . thou shalt bray pomegranate . . . [If ditto(?)] thou shalt bray myrrh . . .
  - 9. [If ditto], and in his nostrils . . . thou shalt cleanse his nostrils . . .
- 11. If a man's nose and mouth hold foetor, . . . thou shalt roll up a linen pledget, bray *Salicornia*-alkali(?), powdered alum, . . . , \*ammi, alum; sprinkle the pledget of linen with oil . . . \*manna(?) green thou shalt bruise, five shekels of . . . thou shalt let him drink and . . . , . . . in oil and beer he shall drink . . .; . . . thou shalt bray, in oil and beer he shall drink; . . . thou shalt reduce, bray, [mix] in oil, let him [dr]ink, and he shall [recover].
- 19. (Here are joined AM. 39, 2 + 45, 7.) [If a man's mouth hath] foetor... and his stomach... gum of Andropogon(?) thou shalt bray in oil and beer [he shall drink, and he shall recover].
- 21. . . . alum (?) thou shalt bray, in oil and beer he shall drink, [and he shall recover].
- 22. . . . mercury 4 thou shalt bray, in oil and beer he shall drink, [and he shall recover].
- 23. . . . alum (?) thou shalt bray, in honey and beer [he shall drink, and he shall recover].

<sup>1</sup> RU.RU

<sup>&</sup>lt;sup>2</sup> Ni-pil (bil, ne, kum) - ma-tu up-ta-na-har (or tu-up-ta-na-har). For the remedy cf. SM. ii, 67, for the "foetid nexus"; "take moist calaminth, and pound it, and squeeze out the juice, and inject it into the nostrils."

<sup>&</sup>lt;sup>3</sup> amNisakku, as it stands.

<sup>&</sup>lt;sup>4</sup> Mercury is a glandular stimulant, P. 601.

- 24. (Here is joined AM. 36, 2.) [If a man's . . .], his heart burns, his saliva 1 comes, foetor attacks him . . . , thou shalt mix . . . in water, bind (it) on his head.
- 26. [If ditto], thou shalt weigh out (?) [in equal quantities?] Nigella, \*ammi, Eruca, arsenic trisulphide, powdered alum, \*storax, (and) bray (them): thou shalt rub a paste (?) <sup>2</sup> of dough on the root of his tooth [until] blood comes forth; (then) these drugs thou shalt apply to his tooth, and he shall recover.
- 29. [If ditto, and his . . .] does not stop, a quarter of a shekel of gum of *Andropogon* (?) in oil and *alappani*-beer [thou shalt mix], blow [into] his [nostr]ils; with a feather thou shalt make him vomit, and, after this, *mulutinna* beer he shall drink and he shall recover.
- 31. [If ditto] . . . \*storax thou shalt bray, he shall drink (it) in beer, evacuate and he shall recover.
- 32. Thou shalt bray powdered alum (and) apply it to his tooth <sup>3 4</sup>; let him lick the upper stone of a *Lolium* mill, and he shall recover.<sup>5</sup>
- 33. (Here is joined AM. 26, 9.) \*Ricinus thou shalt bray, he shall drink (it) in beer, evacuate, and he shall recover.
- 34. Thou shalt slit a leek, rub on the root of his tooth, and he shall recover.<sup>6</sup>
- 35. \*Ammi, Lolium thou shalt bray, he shall drink (them) in beer, evacuate 7 and he shall recover.
  - 36. Nigella thou shalt bray, in beer ditto.
- 37. Powdered alum thou shalt bray, he shall drink (it) in beer, evacuate, and he shall recover. . . . alum thou shalt bray, ditto: \*manna thou shalt bray, ditto.
  - 39. . . . thou shalt reduce . . . into his nostrils thou shalt blow.

<sup>&</sup>lt;sup>1</sup> Illatu, see No. 70, l. 2.

<sup>2</sup> Humbizate, doubtful : خىز ?

<sup>3</sup> Or " mouth ".

<sup>&</sup>lt;sup>4</sup> For alum for teeth, cf. SM. ii, 667.

<sup>&</sup>lt;sup>5</sup> See No. 70, l. 16.

<sup>&</sup>lt;sup>6</sup> Cf. AM. 30, 2, 2. For leeks to cure gangrene of the mouth, see SM. ii, 668.

<sup>&</sup>lt;sup>7</sup> Hal, similarly in l. 14; see also AM. 83, 4, i, 6, 8, 9, 11; SAI. 33; Hal = ard, and cf. Kü. 108, 139.

41. . . . three times . . .

(Here must be placed in continuation AM. 23, 1, and AM. 90, 2, obverse, the latter coinciding with AM. 23, 1, in divisional lines, without actually joining.)

- 2. Pyrites, skin of (the fruit of) the plant . . . , powdered alum [thou shalt bray, in] beer he shall drink.
- 4. If a man [has] foetor, he shall drink . . . in beer. If ditto (2) [he shall drink] \*manna in oil and [beer]. [If ditto (3)], ditto . . . If ditto (4), [ditto] \*ammi (and) . . . [in oil and beer (?)]. [If ditto (5)] . . . ditto. If ditto (6), he shall drink lupins . . .
- 8. If a man's mouth [has] foetor, . . . thou shalt take(?): alum(?), \*ammi, . . . urpana(?) \* \*storax, annuha[ra] . . . , crushed flour, the smell of his teeth thou shalt . . . , these drugs thou shalt apply.
- 12. If ditto, [thou shalt bray] powdered alum, he shall drink [in] beer. If ditto (2) [thou shalt bray] powdered alum, he shall drink [in] pressed grape-(juice). If ditto (3) [thou shalt bray] \*ammi, he shall drink [in] pressed grape-(juice). If ditto (4), . . . , \*ammi(?), he shall drink in oil and beer. If ditto (5), thou shalt bray powdered alum, [roll up a pledget of linen] (which) thou shalt sprinkle with oil, gather <sup>4</sup> up the alum (in it), put it [in] his [nostrils], let him starve himself for one day, and when the daylight shines forth, let him cook(?) . . . <sup>5</sup> (and) eat.
- 18. When a man's mouth and nostrils hold foetor, [thou shalt br]ay [alum], roll up <sup>6</sup> a pledget of linen, sprinkle (it) with oil, gather up the alum (on it), [put it] in his nostrils; with pounded powdered alum . . . (?) <sup>7</sup> thou shalt rub his nostrils until blood appears. [Thou shalt do] this for three days: on the fourth \*manna, green <sup>8</sup> thou shalt press (and) take its juice, two shekels of oil [add, apply, and] he shall recover.

<sup>&</sup>lt;sup>1</sup> Mar (?)-ha-ši, see my Chemistry, 117.

<sup>&</sup>lt;sup>2</sup> BAR = kuliptu, see p. 44, n. 1.

<sup>&</sup>lt;sup>3</sup> See 19, 1, 5.

<sup>&</sup>lt;sup>4</sup> Tulammam; cf. the similar passage in l. 20.  $\tilde{\eta}$  = "gather together".

<sup>&</sup>lt;sup>5</sup> For this line read *ûmu I kam liš-bar*(or *bir)-ri-ma kima ur-ra it-tam-ra* . . . [lib-t]a-šal ikkal.

<sup>&</sup>lt;sup>6</sup> Ta-sap-par (sap on re-examination clear).

<sup>&</sup>lt;sup>7</sup> Lu-ba-ri-e, translation doubtful.

<sup>\* &</sup>quot;GIL (AH. 160) = properly \*manna; 'Gil is the tree from which it comes (= atartu,  $\{ij\}$ ), oak). "Gall-nuts" are common in the equivalents in SM. ii, 68 ff. The drug here necessary is the styptic provided by the oak-galls (tannin).

23. If ditto,¹ thou shalt bray alum, thou shalt roll up a pledget of linen, [sprinkle (it) with oil, gather up the alum (on it)], put it in his nostrils; \*storax, \*ammi in equal parts(?) [thou shalt bray, mix], apply to [his . . .]; thou shalt cleanse his mouth and nostrils . . . thou shalt press [\*manna(?)] green, squeeze its juice, 1 bur of oil [thou shalt add, apply and he shall recover].

27. (Here is AM. 26, 2.) If ditto . . . thou shalt bray together, in . . . in  $hibsi^2$  . . .

Col. iii (here is AM. 26, 6).

- 3. If ditto . . .
- 4. unto . . .
- $5. \quad 1 \quad bur \quad \ldots$
- 6. If a man's mouth . . .

(Approximately here are ll. 1-2, AM. 90, 2, reverse.)

- 3. . . . thou shalt dry (and) bray . . . , thou shalt cleanse, and he shall recover.
  - 5. (For a similar receipt see Col. ii, 11.)
- Ll. 11-22 mutilated. Then after a hiatus of about 20 ll. AM. 36, 2, reverse.
- 1. . . . the bolt . . . hath cast <sup>3</sup> . . . As an untimely birth <sup>4</sup> taketh not the breast of [its] mother, [so shall the . . . not . . .] unto thy *siptu*. [The charm is not . . .], it is the charm of Ea and Marduk, [the charm of Damu] and Gula, [the charm of Nin-aḥa-kuddu], the mistress of charm. [O Gula], mistress of life, quicken [the recovery, . . .]. Charm.
  - 11. [Incantation for when] foetor seizes on him.
  - 12. . . . [in] beer let him drink and he shall recover.

(Eleven lines lost almost entirely.)

(Here must be 27, 5, duplicate of obv. 54, 3, 1-11.)

<sup>&</sup>lt;sup>1</sup> Cf. AM. 28, 3, 6 ff.

² Hibsu; also 33, 1, 10, after fumigation; 105, 1, 13, and its dup. 35, 5, 5, where after his head has been anointed with cedar-oil, he is to eat hibsa with lolium. It may be "شنو" "mash", or hibza خنز "bread" (AH. 128).

<sup>&</sup>lt;sup>3</sup> Cf. the previous text, Col. IV, towards the end.

<sup>&</sup>lt;sup>4</sup> Nid libbi, Holma, 109, nit libbi "womb", but the sense demands "untimely birth" (as Thureau-Dangin, RA. xix, 82); cf. CT. xxiii, 10, 16, AN.KU.BU in the parallel passage. Cf. nidu, perhaps a mock-sun, lit. "a casting" (see my Reports, ii, xxvii).

2. [Charm. It] rageth <sup>1</sup> like a lion, although (?) not <sup>2</sup> a lion . . . , [it] . . . like a panther (?) <sup>3</sup> . . . , [it is fierce ?] in wrath, it uttereth . . . [Whom shall I] send to the daughter of Anu of [Heaven], that they may bring me their ewers of silver, <sup>4</sup> and their basins <sup>5</sup> of [gold, that they may gather me] the waters of the Eulaeus, the waters of the broad sea, [wherein] no woman in her courses hath washed her hands, [wherein] no [unclean woman] hath washed her clothes, [wherein no unclean (?) man] hath brushed (?) <sup>6</sup> his hands

Col. iv (here must be AM. 26, 6).

that they may draw up (the water), . . . ,<sup>7</sup> that they may put the water in his mouth, and the um(?)-mu(?) . . . , the labatu(?),<sup>8</sup> the foetor <sup>9</sup> be removed (?). Recite the charm.

- 3. Incantation for when foetor seizes on him.
- 4. If ditto, alum, \*ammi, thou shalt bray, in honey mix, recite the charm seven times thereon, cleanse his mouth, and he shall recover.
- 6. . . . \*ammi, . . . (?) thou shalt apply, 10 . . . \*ammi in beer he shall drink, and he shall recover.
- 8. [If ditto], \*mint, \*storax, . . . rue, myrrh, "Akkadian salt" . . . [thou shalt introduce(?)] (into) his mouth and nose, it shall take the foetor away.<sup>11</sup>
- 11. [If a man's mouth (?)] is sick with [foet]or (?), one grain of firturpentine, . . . [one grain] of \*ammi, one grain of Lolium, one grain of Nigella, . . . [one grain of asa foeti]da (?) thou shalt reduce, bray, in oil and beer he shall dri[nk, and he shall recover].
  - 14. . . . [a man]'s lip or (?) . . . where the blood . . . three days . . .

<sup>&</sup>lt;sup>1</sup> [Is]-sa-mir, i, 2, of šamâru.

<sup>&</sup>lt;sup>2</sup> Ina (?) la.

<sup>3</sup> Ništinu; Del., Assyr. Stud. 33, "cat".

<sup>4</sup> Sarpi.

<sup>&</sup>lt;sup>5</sup> Kanduri; cf. PRSM. 1924, 30; for the vessel, Thureau-Dangin, RA. 1920, 70, 29.

<sup>6</sup> Unassisu; cf. nussusu ša pirtim (of hair), ša zibbati (of the tail), MA. 703.

<sup>&</sup>lt;sup>7</sup> Lik-ku-mi; or is it "black dog", with some specialized meaning, perhaps the scoop or bucket of the irrigating-machine.

<sup>&</sup>lt;sup>8</sup> Labatu, A , excitavit.

<sup>9</sup> Omitted in AM. 54, 3.

<sup>10</sup> Tutappa, see No. 45, 8, and No. 66, 8.

<sup>11</sup> Not quite certain; possibly "When foetor has come into his mouth and nose".

- (Large Hiatus. Then 23, 7, a charm similar to No. 26, 50, PRSM. 1924, 30, or above, l. 2):—
- 2. . . . Gula . . . that they may bring and . . . he may be satisfied: a seal of vitriol, seven . . . like a storm may . . . The charm is not . . . , (it is) the charm of Ea [and Marduk], the charm of Damu and Gula, the charm of Nin-aḥa-kuddu, [the lady of the charm: it is they who have performed (it) and I who have adopted (?). Charm].
- 8. Two Incantations for the Mouth. As before. Ritual for this: thou shalt bray margusu-\*balsam, anoint . . .
  - 10. (Catch-line.) [If a man]'s [mouth?] is troublesome.2
  - 11. [Second Tablet of the series "If a man]'s teeth ache".

## E. VARIOUS MOUTH-TEXTS.

- No. 67. AM. 23, 2 (K. 6025; cf. K. 2418 + S. 1397, AM. 77, 1 + 28, 7, from which restorations have been made).
- 3. . . . Marduk the charm . . . to loose its knot, mouth-trouble . . . [Recite the charm.]
  - 5. Incantation: if a fiend [has attacked] the mouth of a man.
- 6. (Dup. 78, 1, 19 + 28, 7, 16.) If a man's mouth has mouth-trouble, with \*\*gall-apples, \*ammi, mustard, he shall cleanse his mouth and drink (them) in kurunnu-beer and shall recover.
- 8. (Dup. 78, 1, 20 + 28, 7, 17.) If ditto, anemone, \*Calendula, in kurunnu-beer he shall drink, and shall recover.
- 9. (Dup. 78, 1, 21 + 28, 7, 18.) If ditto, anemone, root of \*Arnoglosson in kurunnu-beer he shall drink, [and shall recover].
  - 10. Three potions 3 from a text-copy of Eridu not . . .
- 11. (Dup. 78, 1, 10 + 28, 7, 7.) If a man's mouth has mouth trouble, thou shalt bray Lolium in well-water,<sup>4</sup> introduce salt, alum (and) vinegar therein; <sup>5</sup> thou shalt leave it out under the stars, in the morning thou shalt

<sup>&</sup>lt;sup>1</sup> Cf. AM. 25, 6, 6.

<sup>&</sup>lt;sup>2</sup> Šumma amelu  $p\hat{u}$ -šu ikabbit is the title of a series (see p. 57) and probably this represents the first line of the first tablet.

<sup>3</sup> Maškâtu (78, 1, 22, mašgâtum) must be for maškâtu,  $\sqrt{17}$ D. Cf. NAK-an-ni maš-ku-ti, 92, 1, ii, 3; maš-ki-a-ti ma-ka-lu-u, 95, 1, 13; maš-ki-tu an-ni-tu, 41, 1, iv, 43; naṣmâdâti $v^i$ u maš-ki-a-ti, 48, 4 r. 7; maš-ki-ta ša En.TE.NA, 64, 3, 6, dup. of 72, 2, 4; cf. AM. 18, 7, 10.

<sup>4</sup> Cf. 76, 5, 5, "in water from the well in the Temple of Marduk."

<sup>&</sup>lt;sup>5</sup> For the tu-ta-rab of 23, 2, 12, the dup. has ana [libbi] LA RU.

wind 1 a linen-(strip) round his forefinger, without a meal thou 2 shalt cleanse his mouth [and he shall recover].

14. (Dup. 78, 1, 6 + 28, 7, 3.) If the accident of a blow on his mouth has fallen [upon him], thou shalt scoop out <sup>3</sup> the right eye of an arsuppufish, and the left eye of a puradu-fish <sup>4</sup>; thou shalt put them in salt for three days, (then) take them out, and thou shalt [apply] the right eye of the arsuppu to the right side, the left eye of the puradu to the left side: with their eyes thou shalt take asa foetida, \*liquidambar, (and) fennel, on the wool of a virgin ewe-lamb (and) the hair of a virgin kid thou shalt thread; the wool of the virgin ewe-lamb and the hair of the virgin kid thou shalt twist,<sup>5</sup> put on his neck, and he shall recover.

No. 68. AM. 23, 4 (K. 8273).6

- 1. If a man is sick of unhealthy saliva . . .
- 2. If ditto, \*mint . . .
- 3. If ditto, five bur of Lolium . . .
- 4. If ditto, a female Mantis 7 of the field . . .
- 5. If a man is sick with dry 8 saliva . . . \*\*Conium maculatum, while
- 1 Takarrak (v. rik), Heb. אברב.
- <sup>2</sup> V. "he."
- 3 Tuhatta[t].
- <sup>4</sup> Arsuppu, puradu (see Frank, ZA. xxix, 191). The eyes must be large, and hence one of these fish may be the bizz of the Tigris and Euphrates, four feet long, sufficiently heavy to need a donkey to carry it (for a picture see Delitzsch, Handel, 8; description, Chesney, Exp. i, 739. I saw one or something like one at Mosul). The other may be the shabbut, a long-bodied fish with large scales, which I have seen at Carchemish. The gall is prescribed in SM. ii, 659 (eyes), 148 (rigidity); cf. Tobit, vi, i ff., of the fish which leaped out of the Tigris, and would have eaten the young man; "but as for the gall, it is good to anoint a man that hath white films in his eyes." The puradu (sirradu?) is prescribed in 82, 2, 1 (its eye); 81, 10, 2 (its gall); KAR. 191, ii, 9 (its brain); and a monster is represented as having the body of a puradu-fish "full of stars" (Devils, ii, 149; cf. Boissier, Documents, 173). I cannot identify either arsuppu or puradu with any of the twenty-two modern Arabic words for fish which I heard in Basrah.
  - <sup>5</sup> Tasappi, 200, coacervarit, collegit.
- <sup>6</sup> For Col. I, cf. the saliva-text, Ebeling and Unger, Arch. f. Keils., i, 36, but the correspondence is doubtful. E. xiii, 17, translates this text, but I venture to offer a translation of the drugs different from his, as well as a different reading of part of the text.
- <sup>7</sup> Ša-il-ti ekli. CT. xiv, 2, K. 71, A, iii-iv, 10 ff., ša'ilum and "ditto ekli". The generic ideogram "locust" shows the kind of creature, which is called after a class of interceding priests, and thus corresponds with μάντις "seer" and a kind of locust or beetle (Mantis religiosa, L.). "The Turks and Arabs hold that it prays constantly with its face towards Mecca" (EB. xvii, 606).
- \* Sapultu; Jensen, KB. vi, 1, 509; GIŠ.KUD (SAI. 332) = iş-şu ša-pu-lu, probably "dry wood". E. "trockenen Speichel".

green . . . , mustard, as a foetida, . . . oil therein thou shalt pour . . . set [under] the stars . . .

No. 69. AM. 24, 1 (Rm. ii, 143).

- 1. If ditto . . . pig-fat (?), fir-turpentine . . . in wheat-flour in beer-yeast <sup>2</sup> in a cup as a com[pound thou shalt mix and apply].
- 3. If a man's mouth hurts him, it being twisted <sup>3</sup> to the right, so that he [can]not speak, his speech he cannot control(?) <sup>4</sup> for six days thou shalt make his diagnosis, <sup>5</sup> on the seventh . . . "doves' dung" <sup>6</sup> wax, fat of \*opopanax which contains oil . . . thou shalt knead(?); fat of perfume of cat's(?) dung (civet ?) <sup>7</sup> . . . his eye(?) and his mouth . . . one(?) day, two(?) days, the physician . . .
- 9. [If a man's mouth hurts him], it being twisted [to the left], so that he [cannot] speak . . . "small palm", . . . gum of \*Aleppo pine . . . his mouth . . .

No. 70. AM. 24, 5 (K. 6520).

2. . . . his saliva 8 . . .

<sup>&</sup>lt;sup>1</sup> The fresh leaves of *Conium maculatum*, L., allay cough (*P.* 437), as a foetida is expectorant (*P.* 196), and mustard sialagogue (*P.* 1079).

<sup>&</sup>lt;sup>2</sup> Suršummu, about 17 times in AM., commonly ext. (and without evidence of internal use). It is of beer, more rarely of "beer and strong beer" (76, 5, 8), and "old beer" (53, 3, 3); its use is as a medium for kneading drugs for a poultice. It is applied for a blow (mišitti TE, 76, 5, 8); to keep away kurari (itch, PRSM. 1924, 10) (5, 5, 2); for eyes, to knead lolium (12, 8, 8); stomachic, probably ext. (61, 2, 12); for feet not walking (to knead licorice, \*Anacyclus pyrethrum, and gazelle-dung, 68, 1 r. 14); for sickness on body (with wheat-flour, 44, 1, ii, 20); various, 24, 1, 2; 29, 5, 4; 37, 7, 2; 42, 3, 11; 52, 7, 12; 72, 2, 2. Interesting is the pathological comparison "if a man's urine is like šuršummi šikari" (66, 7, 4; KAR. 193, 13). "Yeast" was suggested by Küchler, 102, probably correctly. It is "a substance which is deposited in an insoluble state during the fermentation of wine, beer, and vegetable juices" (PC. xxvii, 651). It is insoluble in alcohol, and practically insoluble in water, and when exposed to moderate heat loses its liquid portion; it is antiseptic and stimulating (P. 1236). Its pathological comparison to urine in AM is either the acid fermentation of urine (Quain, Dict. of Med., ii, 1712), or some turbidity (ib. 1711) not easy to identify. Owing to the presence of r and m in the root  $r \not s m$ , we must probably see its cognate in משכרים, Pi. "to remove the dregs (yeast) from wine", משכרים "lees, yeast". The other medical product from wine, purified cream of tartar, from cream of tartar or argol, deposited during vinous fermentation (P. 966) is impossible, owing to its use internally, not externally.

<sup>3</sup> Kuppul more probably 200 devolvit, Etpa. convolutus est. than 200 vinculum, or 200 vinctus.

<sup>4</sup> La ur-ri (?), or perhaps tu-šar-ri.

<sup>&</sup>lt;sup>5</sup> maš.maš.su, probably pirsat-su.

<sup>&</sup>lt;sup>6</sup> AH. 76.

<sup>&</sup>lt;sup>7</sup> AH. 87.

<sup>8</sup> Illatu. The Ebeling-Unger translation "Kraft" in the medical text Archiv. f. Keilschr. i, 39, is probably incorrect. This text gives in l. 7 a receipt for excess of saliva (ru'atu), which with the equations ru'tu, hahhu, and illatu for ин (Br. 8122), makes it clear that illatu is one of the secretions of the mouth. In AM. it is used thus: "If while a man talks his illatu comes,

- 3. [If ditto, his mouth] thou shalt cleanse, rose-water in [his] no [strils thou shalt put] . . . gum of \*galbanum, tops (juice) of *Vitex agnus castus* . . . thou shalt pound (and) strain, mix in fat, spread on vellum, [bind on and he shall recover].
- 6. [If ditto], his mouth thou shalt cleanse, water of *Vitex agnus castus* in his nostr[ils thou shalt put]..., pine-turpentine, fir-turpentine, gum of \*Aleppo pine, *Nerium odorum*(?),... tops (juice) of tamarisk, tops (juice) of *Crataegus azarolus*(?) together thou shalt pound (and) strain, mix in fat, [spread] on vellum, [bind on and he shall recover].
- 9. [If ditto], his mouth thou shalt cleanse, tops (juice) of licorice, tops (juice) of *Nerium oleander*(?), tops (juice) of apple, in water thou shalt boil, wash [it]: . . . fir-turpentine, wheat-flour, "doves' dung," gazelle-dung . . . mix in fat, spread on vellum, bind on and he shall recover.
- 12. [If ditto, his mouth] thou shalt cleanse, in water of *Vitex agnus castus* wash it, pine-turpentine, *Nerium odorum* (?), gum of \*galbanum, [ashes?]

he spits UH-su (= illat-su or ru'ut-su) in the man's face" (29, 5, 12, cf. 2, 4, 8); (b) "If while a man talks his illatu comes" (31, 4, 21); (c) "If a man's illatu comes copiously into his mouth and is not stayed" (31, 4, 18), very similar to ib. 11 "If ru'tu (saliva) comes copiously into a man's mouth", ib. 14 "If ru'tu in a man's mouth is not stayed, that man is bewitched". In (c) for the first the remedy is a compound of tamarisk (gallic acid, astringent, P. 551, to lessen discharge from mucous membranes), \*galbanum (similar to the expectorant asa foetida, but less energetic, P. 548), fir and pine-turpentine (expectorant, P. 1199); for the second, a compound of fir-turpentine (expectorant), "seed" of tamarisk (astringent) tragacanth (? or savin?), \*mint (stomachic, and covering taste of nauseous medicines, P. 764), asa foetida (expectorant, P. 196), hellebore ("in doses short of any dangerous or violent effect, white hellebore exercises a peculiar action on the secreting organs," PC. xxvi, 252), stone of annuhara (unidentified), etc. This latter is paralleled by Archiv. f. Keils. 7, Summa MULU ru'atu-su rabis illaku pl-ma la ipparasu "If a man's saliva comes copiously and is not stayed", the remedy being Salicornia-alkali, mustard, asa foetida, hellebore, and annuhara. L. 1 ff. of the same text "If a man's illatu comes, etc., for his recovery and to stop his illatu" (ana balati-su u il-la-ti-šu pa-[ra-si]), for which 15 še of lupins, hellebore, tragacanth (?) (or savin?), licorice root, \*Chrysanthemum segetum are to be compounded. It seems therefore clear that ru'tu must be the same as or closely allied to illatu in meaning, and that "saliva" is almost certainly correct for this latter.

Of the other equivalents for UH,  $rupuštu = \Box \Box \Box$  "mud, slime" (MA. 978, quoting authorities; Kü. "Auswurf"). [Šumma N]A rîš libbi-šu rupulta iši rl-ši rîš libbi-šu uṣarab-šu "If a man's epigastrium holds heartburn, his epigastrium burning him" (48, 2, 1). Rupuštu is, I presume, the acid eructation usual in such stomachic trouble; "Heartburn is a hot or scalding sensation . . . frequently accompanied by eructations of a very acid character" (Quain, Dict. of Med. i, 633). I prefer ṣarabu, sufficiently well attested for "burn" (MA. 892; Del., HWB. 573) and paralleled by iḥamat-su (AM. 45, 6, 5 and 6), to carabu "press" (E. xiii, 3), but the latter is possible. Cf. also "rupuštu in his mouth" (24, 3, 10; and cf. Kü. ii, ii, 39, 44; iv, 34).

The other equivalents for UH must have similar meanings. Uhhu, probably similar to "to cough", hahhu "phlegm" (Auswurf, Holma, 9); hurhummatu, also an equivalent for U (Br. 8684); and kušū.

of an oven together thou shalt pound (and) strain, mix in fat, spread on vellum, bind on and he shall recover.

14. [If . . .] hurts him, in his mouth flour-dust of millet . . . dried [roses?] he shall spread, "[human] skull" . . .; he shall lick the upper stone of a *Lolium*-mill [and he shall recover].

## No. 71. AM. 28, 2 (K. 3295).

- 1. [If a man is attacked by] . . . and he has mouth-trouble, . . . his tooth (mouth) troubling, his saliva flowing unceasingly, . . . and blood exuding: <sup>5</sup>
  - 4. (Mutilated.) 6
- No. 72. AM. 29, 1 (K. 8777) + 89, 3 (K. 10429 + 11677), now joined to K. 2175, CT. xxiii.
- No. 73. AM. 29, 5 (K. 3461).
- 4. If ditto, sediment of the river, yeast of beer, . . . Lolium, roses, \*ammi, seed of kan [kadu](?), pine-turpentine, fir-turpentine, in equal portions thou shalt mix in water, dry in the sun: beat up again, boil in oil in a pan, beating it up; beat up again in fat, touch with sweet oil, spread on vellum, bind all his flesh: thou shalt bray \*\*Calendula, lupin, \*corn-marigold, mix in oil, leave out under the stars, let him drink without a meal.
- 12. If a man's saliva comes when he is talking (and) he ejects his spittle into a man's face, his teeth ache, his mouth hurting (?) him, the eructation of . . . , that man's trouble 8 (is) . . . ; myrtle, suadu, seed of . . . , seed of caper, seed of *Lycium*, . . . , alum, . . . tamarisk-seed . . .
- No. 74. AM. 30, 2 (S. 1524).9
- 2. . . . : If ditto, thou shalt slice a leek, [rub it on the root of his tooth, and he shall recover]. 10

 $<sup>^{1}</sup>$  [It-t]a-na-ka-la-šu.

<sup>&</sup>lt;sup>2</sup> Cf. AM. 30, 8, 5,

<sup>&</sup>lt;sup>3</sup> Isarrak, see No. 65, i, 5.

<sup>4</sup> TAK.NA sahlî ilik, also 36, 2, 9; ina TAK.NA RAT, 91, 5, 4; ina TAK.NA sahlî RAT, 40, 1, 63; ina NA sahlî RAT, 14, 8, 7. TAK.NA = abnu elû "the upper (mill)-stone", and TAK.NA sahlî šAR = elit urşi (cf. kalab urşi, ii R. 6, a-b, 18), Br. 1584. Urşu = mazuktu (HWB. 137), and elit urşi = amitti ,, (ib.); mazuktu = "a mortar" (E. xiii, 6, n. 4), so that TAK.NA will be "the upper stone", especially of a mortar used in grinding Lolium, doubtless smaller than the usual bread-mill, since drugs are to be ground in it (cf. the manna of Num. xi, 8). Cf. takur-şi, CT. xxiii, 50, 17. Ilik, Ilik".

<sup>5</sup> Ihila, probably same root as hilu "gum" (hill "dance", "writhe", i.e. "roll"?).

<sup>&</sup>lt;sup>6</sup> For "the Temple of Marduk" cf. 76, 5, 5, 6; 93, 1, 8; 105, 1, 4. Cleansing the teeth is part of the receipt.

<sup>7</sup> Ihtanalik-šu.

<sup>8</sup> Nullati (v. Del., HWB. 454), sign vexavit.

<sup>9</sup> AM. 29, 13 (K. 3236) may be the tablet preceding Ebeling-Unger, Arch. f. Keils., i, 36. 10 See AM. 36, 2, 11. Ekir, "root". Cf. SM. ii, 189, 667, garlic applied to hollow teeth.

## Thompson: Assyrian Medical Texts

- 3. [If ditto] . . . \*ammi, seed of Eruca, 1 salt, alkali . . . thou shalt bray, mix in refined (?) 2 oil bind on.
- 5. [If ditto] . . . nettle-seed thou shalt bray, in oil thou shalt mix, anoint.
- 6. [If ditto] . . . [the fat?] of a lion,<sup>3</sup> the liquid <sup>4</sup> of a cricket,<sup>5</sup> the gall of a snake, . . . , the blood of an anduhallatu <sup>6</sup>-lizard in oil thou shalt mix, anoint.
  - 7. [If ditto] . . . Lolium in oil thou shalt mix, anoint.
- 8. . . . and his mouth is puckered, its name is ziktu : . . . and his mouth is broken, its name is ziktu: . . . hurts him, its name is ziktu: If the affected spot is dark(?) (and) small(?) and hurts him, its name is ziktu. Thou shalt bray . . . pine-turpentine, mix in kurunnu-beer, bind on him and he shall recover.
- 13. . . . in the suet of a ram's kidney thou shalt mix, spread on vellum, bind on: . . . wax in fat thou shalt mix, bind on.
  - 15. . . . their mark . . .

74

- No. 75. AM. 30, 3 (K. 7656) + 18, 11 (K. 9144) + 26, 10 (K. 16448). Col. ii.
  - 2. Šumma ditto  $\delta ar(?)$  . . .
  - 3. tur-di ka . . . iš tu . . .
  - 4.  $ba lit-tu \ ni(?) \dots idku \ šu \dots$

<sup>1</sup> Used here for teeth on account of its "hot" seeds.

² Kirrani, "Š" refine".

<sup>3 &</sup>quot;Lion fat" is a name for opium, AH. 46.

<sup>4</sup> Ța-lil (?) كُلُمٌ "dew", كُمُكُمٌ humor, عُلِّلُ "milk, blood". But lil (?) may be ta or um.

<sup>&</sup>lt;sup>5</sup> Lalara (MA. 482, "cricket?" for lallartu) must be Gryllus domesticus, L., from the shrill repetitive noise indicated by lalaru, like the ululation of the professional mourner (cf. the rapid "'Ali, 'Ali, 'Ali, 'Ali " of the women at Muharram).

<sup>&</sup>lt;sup>6</sup> Anduhallatu (cf. Weidner, RA. 1914, 119), from SAI. 525, must be a kind of lizard. The sign GI in 525 must surely be ZI (cf. AM. 61, 5, 10, and SAI. 526, EME.MIŠ.GIŠ.GI = suraru ša igari, the latter part of which must be GIŠ.ZI, cf. Br. 5709, GIŠ.ZI = igaru). The group EME.MIŠ must undoubtedly refer to the way in which the lizard uses its tongue, as anyone who has seen the agile "lizards of the wall" in Basrah will remember. It must surely be divided andu (= amtu, as in late Babylonian = "handmaid") hallatu, i.e. "creeping handmaid."

<sup>&</sup>lt;sup>7</sup> Hundud, doubtless with a "resolved" d (like pungulu), from خُدُّد "to be wrinkled". The cure indicates that it does not mean a "hare-lip".

<sup>8</sup> Ziktu, properly a sting or point.

- 5. If ditto, mušdim [gurinna], its fat . . . , haematites, fourteen times . .
  - 7. Šumma ditto tam(?) šil(?) gas si(?) . . . di im a-šar taki- . . .
  - 8. bu-za-bu-ru kur-ba- . . . eli  $p\hat{i}$ - $\check{s}u$   $ta\check{s}akan$  (an) . . .
  - 9. kima mê ša ana eli pî-šu . . . ut-ta . . . ši . . .
- 10. If ditto, thou shalt (?) . . . ¹ male mandrake-root, its juice thou shalt put on his aching tooth. If ditto, thou shalt pound a humbibitu,² roll (it) up in wool, sprinkle with oil put (it) into the ear (on the side) of the aching tooth.³ If ditto, thou shalt bray Nigella, put it on his tooth. If ditto, thou shalt bray hellebore,⁴ anoint his tooth therewith.
- 14. . . . created Anu, Anu the host of heaven, Anu the host of earth: the earth created the W[orm]: . . . the foetor, which hath increased the foetor, hath seized him as a lion seizeth the throat of a cow(?), [as a jackal] seizeth a steer, [as a . . . teareth(?)] flesh, so hath the Worm established her seat amid the teeth; [as one who is distant] forgetteth his city-street, [as a dead man passeth not the gate of life, as an untimely birth sucketh not] the breast of its mother . . . [ana sip]-ti-šu . . . 5
- No. 76. AM. 30, 4 (K. 13801).
- 2. . . . thou shalt bray . . . , put on his tooth: thou shalt bray . . . , put on his tooth
- 5. . . . put on his tooth: . . . put on his tooth. No. 77. AM. 30, 6 (K. 2510).
- Obv. 1. (End of Sumerian charm.) . . . like water from a well . . .: neither drug nor water entereth: . . . Marduk hath seen: "What I"; "Go, my son," 6 . . . and take thyme, put it . . . , put it on the tooth of the man, son of his god; . . . (?) he shall recover: as he goeth, the . . . shall go forth.

<sup>&</sup>lt;sup>1</sup> Ta (?)-na-ad-da.

<sup>&</sup>lt;sup>2</sup> Fossey, Babyloniaca, v, 1, 8-9, 73, "if a woman bear a humbabitam." Hum-bi-bit-tum, Weidner, RA. 1914, 119.

<sup>3</sup> Cf. SM. ii, 189: "pour into the ear on the side of the face which is affected."

<sup>4</sup> Nigella for teeth, SM. ii, 189; hellebore, ib. 185.

<sup>&</sup>lt;sup>5</sup> Cf. AM. 36, 2, iii; KAR. 181 r. 11; CT. xxiii, 10, 16.

<sup>6</sup> For this abbreviated incident see my Semitic Magic, xlvii.

<sup>7</sup> In AH. 195 I mentioned that we did not yet know the Sumerian for this plant; and the Sumerian charm uses the Assyrian word, as though the Assyrian form alone was known. For oil of thyme on a decayed tooth cf. ib. 195. I cannot agree with Ebeling's later view (doubtless on the strength of HAR = hašů, SAI. 6418) that "HAR. HAR = hašů "thyme" (see Arch. f. Gesch. xiv, 26, 17); (see AH. 64 = mustard).

7. . . . thou shalt perform the charm, in his mouth he shall mix, and drink in beer, and he shall recover.

Rev. 1. . . . may his tooth be freed, . . . of Eridu . . . may his knot be loosed!

- 3. . . . [the charm] seven times thou shalt repeat, in his mouth he shall mix, and he shall recover.
- 4. [If a man's]... binds him and creeps(?)<sup>2</sup>... to its front, not the side(?)...
  - 7. ... asa foetida 3 thou shalt take, thereon perform the charm ...

No. 78. AM. 30, 13 (81-2-4, 418).

- 2. . . . myrrh . . . , asa foetida, 3 . . . asa foetida on his tooth thou shalt spread . . .
  - 5. If ditto, sweet usa-beer . . .

(For ll. 6-8 see No. 65, i, 7.)

No. 79. AM. 31, 4 (K. 2417).

Obverse. 2. . . . asa foetida . . .

- 3. . . . thereon thou shalt put, in . . .
- 4. . . . asa foetida thou shalt bray, put thereon . . .
- 5. . . . sulphur (?) thou shalt bray . . .
- 6. [If] sorcery attacks [a man], thou shalt remove the end and root 4 of lupins, bray their middle part . . .
- 7. [If a man's] . . . is sick, and his sleep is kept away thereby,<sup>5</sup> "salt of Akkad" . . . either [in beer] or in oil thou shalt put, set (it) under the stars . . .
- 9. (Dup. of 44, 5, 6.) [If a man's . . . is sick] and his sleep is kept away thereby, fifteen rubbed (?) <sup>6</sup> grains of Lycium, fifteen rubbed (?) grains of . . . together thou shalt rub <sup>7</sup> in half a shekel of ox-fat, apply by his anus [and he shall recover].

<sup>&</sup>lt;sup>1</sup> Umanzag מזג, מבן, "mix ".

<sup>&</sup>lt;sup>2</sup> Išpapa; šapāpu = alāku (MA. 1087); cf. 2.

<sup>&</sup>lt;sup>3</sup> Cf. SM. ii, 189.

⁴ Pû u išdu, cf. ¬₽.

<sup>&</sup>lt;sup>5</sup> Šitta-šu etanabbal, cf. next par. and 57, 5 r. 1.

<sup>&</sup>lt;sup>6</sup> Sikti, see No. 33, 3, n. The correct reading is "15".

<sup>7</sup> Tusamah; various drugs thou shalt bray, with fat tusamah (KAR. 195 r. 34); lu gab dišpi u  $^3$ GL tusamah (Kü. ii, ii, ii, 43); . . . zız.a.an tusamah (AM. 72, 2 r. 9); cf. CT. xxiii, 50, 14. Kü. "verreiben?"

- 11. [If] the saliva in a [man]'s mouth comes too freely,<sup>1</sup> [thou shalt bray] fir-turpentine, tamarisk-"seed" (= gall), savin(?) (or tragacanth(?)), . . . , \*mint, asa foetida, . . . , hellebore, stone of annuhara, stone of . . . in the night before the Goat-star <sup>2</sup> thou shalt set . . . without a meal in beer [he shall drink, and he shall recover].
- 14. If the saliva in a man's mouth does not cease to flow, that man has been bewitched: for [his] recovery, thou shalt bray together . . . eligulla, savin(?) (or tragacanth(?)), [he shall drink] in kurunnu-beer, [and he shall recover].
- 16. If the saliva in a man's mouth does not cease to flow, that man has been bewitched: for his recovery thou shalt bray together <sup>3</sup>... mustard, \*\*oak-galls, licorice-root, \*liquidambar, [he shall drink, and he shall recover].
- 18. If a man's saliva comes too freely in his mouth, without ceasing . . . tamarisk (-galls), \*galbanum, fir-turpentine, pine-turpentine together thou shalt bray, [he shall drink and recover].
  - 20. To make his saliva flow, spurge like . . .
- 21. If a man's saliva comes while he is talking, myrtle (?) . . . , Lycium, \*mint . . .
- Rev. 1. Earth and Hell its figure, from Hell... and his muscles; his semen which on close-stool(?)<sup>5</sup>... (or) in bed has passed. Charm. This charm thou shalt recite three times over...
- 4. Cinnabar, oxide of iron, lapis lazuli, \*alabaster 6 . . . thou shalt thread, on his neck hang.
  - 6. . . . \*borax in beer . . .
- 7. . . . asa foetida, \*Arnoglosson, asa (dulcis?), . . . male mandrake: these seven drugs thou shalt bray together, [he shall drink, and he shall recover].

<sup>&</sup>lt;sup>1</sup> See Ebeling-Unger, Arch. f. Keils. i, 36, 7.

<sup>&</sup>lt;sup>2</sup> Cf. Landsberger, Arch. f. Keils. i, 77.

<sup>&</sup>lt;sup>3</sup> Itti aḥamiš.

<sup>&</sup>lt;sup>4</sup> Ana illatu-šu šuluka(ka). For kasi amhara = Euphorbia helioscopia, L., see AH. 37.

<sup>&</sup>lt;sup>5</sup> KU mithurti, surely the same as GIŠ.GU.ZA.NIGIN.NA = kussi mithurti, Br. 11160. If mithurti, through its meaning "agreement, harmony", can = "ease" (i.e. lieu d'aisance), then there is no difficulty for this explanation, which the parallelism of "bed" seems to demand. The Assyrian latrine even in a temple (as I found in digging out the Temple of Nabû at Nineveh for the British Museum in 1904–5) is the same as the modern Oriental equivalent, a slit in the floor over a drain. Cf. E.KU.DAM (Holma, 68, "w.c. für Damen").

<sup>&</sup>lt;sup>6</sup> These must surely refer to colours, vermilion, black, blue, white, of beads.

Ja-H 4\*

	thou shalt knes. tpply, and he shall r		er ("old br	eak ''), [sprea	d] on
10	•	•	•	•	
	his semen, inte (= gall), Crataegus	•		- "	•
13. (2	Fragmentary incanto	ution.)			

¹ Ina piki la piki, which occurs as ina pikam la pikam, CT. xxiii, 13, 18, followed by iparrud (glossed izarrud, probably more correct). Iparrud is not satisfactory; izarrud may be ɔj suffocavit. I cannot agree with E. (xiii, 143) "er unregelmässig(?) Frost hat". Cf. ki-i pi-i-gi (Scheil, Rec. des Lois Assyr., 26, iii, 30).

<sup>&</sup>lt;sup>2</sup> It has certain similarities with Atropa Belladonna, L. Cf. AH. 203 with AH. 105.

<sup>\*\*\* (</sup>a) "Mercury" used in the above translations must still be considered doubtful.
(b) LA has the certain meaning "ashes". (c) The exact translation for "salt of Akkad" is doubtful.